JUL 5 1928

INDEX NUMBER

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New Edition—Graves' Gynecology

A new work—that's what this edition really is, because the revision was so extensive that it amounts to rewriting. Whole sections have been cut out, others have been completely rewritten, new chapters have been inserted, old material that was retained received new form because of omissions, corrections, and additions. The work throughout reflects particularly the recent progress along the lines of physiology and oncology. These advances necessitated radical changes in the chapters on the physiology of menstruation and ovulation, endocrinology, organotherapy, the vagina and the Fallopian tubes. The entire subject of gynecologic tumors has been rewritten, including a new classification of ovarian tumors. There are new chapters on cancer etiology and its practical application to pelvic cancer; on the radium treatment of surgical cancer based on the work of the French school; the relationship of gynatresia to cancer; the lead treatment of cancer, etc. Endometriosis occupies a monograph. The entire subject of sterility has been rewritten. Other new material includes diathermy, protein therapy, the sedimentation test, leukoplakia and kraurosis and their relation to cancer of the vulva; constitutional leukorrhea. Several new gynecological operations are described.

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The Massachusetts Medical Society

The next Annual Meeting of the Massachusetts Medical Society will be held in Boston, June 11 and 12, 1929, "unless otherwise ordered by the Council."

OFFICERS ELECTED BY THE COUNCIL, JUNE 5, 1928

PRESIDENT: JOHN M. BIRNIE, 14 Chestnut St., Springfield.
VICE-PRESIDENT: PEER P. JOHNSON, 163 Cabot St., Beverly.
SECRETARY: WALTER L. BURRAGE, 182 Walnut St., Brookline.
TREASURER: ARTHUR K. STONE, Auburn St., Framingham Center.

STANDING COMMITTEES FOR 1928-1929

COMMITTEE OF ARRANGEMENTS
James Hitchcock, E. P. Hayden, H. Q. Gallupe, T. H. Lanman, F. H. Colby.

COMMITTEE ON PUBLICATIONS
Homer Gage, John W. Bartol, R. I. Lee, R. B. Osgood, E. W. Taylor.

COMMITTEE ON MEMBERSHIP AND FINANCE
D. N. Blakely, Algernon Coolidge, Samuel Crowell, Gilman Osgood, Homer Gage.

COMMITTEE ON ETHICS AND DISCIPLINE
David Cheever, W. D. Ruston, S. F. McKeen, Kendall Emerson, A. C. Smith.

COMMITTEE ON MEDICAL EDUCATION AND MEDICAL DIPLOMAS
P. P. Johnson, A. G. Howard, R. L. DeNormandie, H. P. Steven[s], C. H. Lawrence.

COMMITTEE ON STATE AND NATIONAL LEGISLATION
J. M. Birnie, A. W. Marsh, T. J. O'Brien, F. E. Jones, Shield[s] Warren.

COMMITTEE ON PUBLIC HEALTH
Dwight O'Hara, E. F. Cody, R. I. Lee, T. F. Kenney, F. G. Curtis.

COMMITTEE ON MALPRACTICE DEFENSE
F. G. Balch, E. D. Gardner, F. B. Sweet, R. P. Watkins, A. W. Allen.

OFFICERS OF THE SECTIONS FOR 1929

SECTION OF MEDICINE
Chairman, Dr. Lester C. Miller, Worcester; *Secretary*, Dr. Roger W. Schofield, Worcester.

SECTION OF SURGERY
Chairman, Dr. Philemon E. Truesdale, Fall River; *Secretary*, Dr. L. S. McKittrick, Boston.

SECTION OF TUBERCULOSIS
Chairman, Dr. John B. Hawes, 2nd, Boston; *Secretary*, Dr. Walter A. Griffin, Sharon.

SECTION OF PEDIATRICS
Chairman, Dr. C. A. Sparrow, Worcester; *Secretary*, Dr. Joseph Garland, Boston.

SECTION OF OBSTETRICS AND GYNECOLOGY
Chairman, Dr. Frederick L. Good, Boston; *Secretary*, Dr. Louis [E.] Phaneuf, Boston.

SECTION OF RADIOLOGY AND PHYSIOTHERAPY
Chairman, Dr. William D. McFee, Haverhill; *Secretary*, Dr. P. [H.] Butler, Boston.

OFFICERS OF THE DISTRICT MEDICAL SOCIETIES

ELECTED BY THE DISTRICT MEDICAL SOCIETIES BETWEEN APRIL 15 AND MAY 15, 1928

BARNSTABLE—*President*, S. M. Beale, Jr., Sandwich; *Vice-President*, H. D. Handy, Harwich; *Secretary*, J. L. Chute, Osterville; *Treasurer*, H. B. Hart, Yarmouthport; *Librarian*, E. E. Hawes, Hyannis.

BERKSHIRE—*President*, C. H. Richardson, Pittsfield; *Vice-President*, M. S. Eisner, Pittsfield; *Secretary*, H. J. Downey, Pittsfield; *Treasurer*, C. T. Leslie, Pittsfield.

BRISTOL NORTH—*President*, F. H. Dunbar, Mansfield; *Vice-President*, T. J. Robinson, Taunton; *Secretary*, J. L. Murphy, Taunton; *Treasurer*, J. V. Chatigny, Taunton.

BRISTOL SOUTH—*President*, J. G. Hathaway, New Bedford; *Vice-President*, G. L. Richards, Fall River; *Secretary and Treasurer*, G. E. Borden, Fall River.

ESSEX NORTH—*President*, G. E. Kurth, Lawrence; *Vice-President*, R. L. Toppan, Newburyport; *Secretary and Treasurer*, J. Forrest Burnham, Lawrence.

ESSEX SOUTH—*President*, O. S. Pettingill, Middleton; *Vice-President*, C. L. Curtis, Salem; *Secretary*, R. E. Stone, Beverly; *Treasurer*, Andrew Nichols, 3d, Danvers; *Librarian*, C. M. Cobb, Lynn.

FRANKLIN—*President*, A. H. Ellis, Greenfield; *Vice-President*, W. K. Clark, Greenfield; *Secretary and Treasurer*, Charles Moline, Sunderland.

HAMPDEN—*President*, E. P. Bagg, Jr., Holyoke; *Vice-President*, Dudley Carleton, Springfield; *Secretary and Treasurer*, H. L. Smith, Springfield.

HAMPSHIRE—*President*, F. E. O'Brien, Haydenville; *Vice-President*, L. B. Pond, Easthampton; *Secretary and Treasurer*, L. O. Whitman, Northampton; *Librarian*, F. H. Smith, Hadley.

MIDDLESEX EAST—*President*, D. T. Buzzell, Wilmington; *Vice-President*, F. T. Woodbury, Wakefield; *Secretary*, A. R. Cunningham, Winchester; *Treasurer*, Richard Dutton, Wakefield; *Librarian*, J. M. Wilcox, Woburn.

MIDDLESEX NORTH—*President*, J. H. Lambert, Lowell; *Vice-President*, A. G. Scoboria, Chelmsford; *Secretary*, T. A. Stamas, Lowell; *Treasurer*, M. D. Bryant, Lowell; *Librarian*, P. J. Meehan, Lowell.

MIDDLESEX SOUTH—*President*, A. W. Dudley, Cambridge; *Vice-President*, Fresenius Van Nüys, Weston; *Secretary*, S. M. Biddle, Cambridge; *Treasurer*, Edward Mellus, Newton.

NORFOLK—*President*, Victor Safford, Jamaica Plain; *Vice-President*, S. F. McKeen, Brookline; *Secretary*, F. S. Cruickshank, Dorchester; *Treasurer*, G. W. Kaan, Reading.

NORFOLK SOUTH—*President*, D. A. Bruce, Atlantic; *Vice-President*, G. M. Sheahan, Quincy; *Secretary, Treasurer and Librarian*, N. [P.] Pillsbury.

PLYMOUTH—*President*, T. H. McCarthy, Brockton; *Vice-President*, F. W. Murdock, Brockton; *Secretary and Treasurer*, L. B. Packard, Brockton; *Librarian*, J. H. Weller, State Farm.

SUFFOLK—*President*, Lincoln Davis, Boston; *Vice-President*, W. [H.] Robey, Boston; *Secretary*, A. H. Crosbie, Boston; *Treasurer*, John Rock, Boston.

WORCESTER—*President*, P. H. Cook, Worcester; *Vice-President*, A. [M.] Shattuck, Worcester; *Secretary*, C. A. Sparrow, Worcester; *Treasurer*, G. O. Ward, Worcester; *Librarian*, A. C. Getchell, Worcester.

WORCESTER NORTH—*President*, J. H. Kearney, Fitchburg; *Vice-President*, C. S. Brigham, Leominster; *Secretary*, C. H. Jennings, Fitchburg; *Treasurer*, F. H. Thompson, Jr., Fitchburg.

Fellow Members! We want your support.

The New England
Journal of Medicine

VOLUME 198 JUNE 28, 1928 NUMBER 19

The Massachusetts Medical Society

PROCEEDINGS OF THE COUNCIL

ANNUAL MEETING, JUNE 5, 1928

THE annual meeting of the Council was held in the Ball Room of the Bancroft Hotel, Worcester, Tuesday, June 5, 1928, at 12 o'clock noon. The President, Dr. John M. Birnie, of Springfield, was in the chair and the following 119 councilors present:

BARNSTABLE
W. D. Kinney

BERKSHIRE
P. J. Sullivan

BRISTOL NORTH
F. H. Dunbar
W. H. Allen
F. A. Hubbard

BRISTOL SOUTH
R. B. Butler
G. H. Hicks
W. A. Nield

ESSEX NORTH
G. E. Kurth
E. S. Bagnall
J. F. Burnham
H. F. Dearborn
T. R. Healy
F. S. Smith
F. W. Snow
W. D. Walker

ESSEX SOUTH
J. A. Bedard
W. T. Hopkins
J. F. Jordan
W. G. Phippen
R. E. Stone

FRANKLIN
H. G. Stetson
G. P. Twitchell

HAMPDEN
E. P. Bagg, Jr.
J. B. Atwater
E. A. Bates
J. M. Birnie
E. L. Davis
A. J. Douglas
H. D. Gafney
E. A. Knowlton
S. A. Mahoney
A. G. Rice
J. P. Schneider
G. L. Steele

HAMPSHIRE
A. J. Bonneville
J. G. Hanson

MIDDLESEX EAST
R. R. Stratton

MIDDLESEX NORTH
J. H. Lambert
J. A. Gage
J. E. Lamoreux
G. A. Leahey
G. F. Martin
J. A. Mehan

MIDDLESEX SOUTH
A. W. Dudley
C. F. K. Bean
E. H. Bigelow
W. T. Burke
D. F. Cummings
Cora E. Harriman
H. J. Keaney
R. W. McAllester
C. E. Mongan
C. H. Staples
E. H. Stevens
Fresenius Van Nüys
W. S. Whittemore

NORFOLK
Victor Safford
F. G. Balch
D. N. Blakely
F. A. Bragg
W. L. Burrage
Samuel Crowell
F. P. Denny
D. G. Eldridge
W. A. Griffin
J. B. Hall
A. H. Hodgdon
H. T. Holland
I. R. Jankelson
E. B. Lane
S. F. McKeen
P. R. Withington

NORFOLK SOUTH
W. G. Curtis
N. R. Pillsbury
C. A. Sullivan

PLYMOUTH
T. H. McCarthy
W. G. Brown
J. J. McNamara
C. G. Miles
G. A. Moore
J. P. Shaw
A. C. Smith

SUFFOLK
Lincoln Davis
A. W. Allen
A. E. Austin
J. W. Bartol
Horace Binney
David Cheever
R. C. Cochrane
A. H. Crosbie
G. S. Derby
J. H. Means
T. J. O'Brien
W. S. Parker
W. R. Sisson
J. S. Stone
W. T. S. Thorndike
R. H. Vose

WORCESTER
P. H. Cook
W. P. Bowers
L. R. Bragg
W. J. Delahanty
G. A. Dix
M. F. Fallon
Homer Gage
J. J. Goodwin
R. W. Greene
David Harrower
A. G. Hurd
A. W. Marsh
L. C. Miller
E. H. Trowbridge
R. P. Watkins
F. H. Washburn
S. B. Woodward

WORCESTER NORTH
J. H. Kearney
W. E. Currier
C. H. Jennings

The minutes of the last meeting were read in abstract by the Secretary and as no omissions or corrections were noted they were accepted as read and as printed in the Proceedings of the February meeting. The President announced that the officers and Fellows of the Society were cordially invited to visit the United States Veterans Hospital at Rutland Heights any day between the hours of 3 and 5 p. m. The Secretary read the names of the Nominating Committee, by Districts, and the following answered to their names: BARNSTABLE: W. D. Kinney; BRISTOL NORTH: F. A. Hubbard; BRISTOL SOUTH: R. B. Butler; ESSEX NORTH: T. R. Healy; ESSEX SOUTH: W. T. Hopkins; FRANKLIN: G. P. Twitchell; HAMPDEN: E. A. Bates; HAMPSHIRE: J. G. Hanson; MIDDLESEX NORTH: J. E. Lamoreux; MIDDLESEX SOUTH: E. H. Stevens; NORFOLK: D. G. Eldridge; NORFOLK SOUTH: C. A. Sullivan; PLYMOUTH: J. P. Shaw; SUFFOLK: David Cheever; WORCESTER: David Harrower; WORCESTER NORTH: W. E. Currier. The committee retired.

The appended reports of the Committee on Membership and Finance, both on membership and finance, were presented by Dr. D. N. Blakely. Each was accepted and its recommendations adopted, by vote.

REPORT OF COMMITTEE ON MEMBERSHIP AND FINANCE, ON MEMBERSHIP

The Committee on Membership and Finance makes the following recommendations as to membership:

1. That the following named seven Fellows be allowed to retire under the provisions of Chapter I, Section 5, of the By-Laws:

1. Dole, Mary Phylinda, Melrose, as of January 1, 1928.
2. Francis, George Hills, Brookline.
3. Goss, Arthur Vincent, Brattleboro, Vermont.
4. Marsh, Albert, South Natick.
5. Rawson, George Wallace, Amherst.
6. Rice, Florence Frances, Cheshire, as of January 1, 1928.
7. Walsh, Charles Joseph, Arlington, as of January 1, 1928.

2. That the dues for 1928 of the following named two Fellows be remitted under the provisions of Chapter I, Section 6, of the By-Laws:

1. Brayton, Roland Walker, Dorchester.
2. Donahue, William Francis, Watertown.

3. That the following named seven Fellows be allowed to resign, under the provisions of Chapter I, Section 7, of the By-Laws:

1. Cameron, Isabel, Minneapolis, Minnesota, as of January 1, 1928.
2. Kleiman, Shmaria, Detroit, Michigan, as of January 1, 1928.
3. Kliger, David, Detroit, Michigan, as of January 1, 1928.
4. Merrill, Charles Henry, Oskaloosa, Iowa.
5. Nelson, Christian Augustus, Cambridge, with remission of unpaid dues.
6. Sanford, Clarence Higgins, Exeter, New Hampshire, as of January 1, 1928.
7. Walker, Clifford Black, Los Angeles, California, with remission of unpaid dues.

4. That the following named three Fellows be deprived of the privileges of fellowship, under the provisions of Chapter I, Section 8, (a) and (b), of the By-Laws:

1. Gordon, Louis.
2. Holmberg, Carl Lester Magnus, Campello.
3. Kelley, Edward Paul, Woburn.

5. That the following named thirteen Fellows be allowed to change their membership from one District Society to another without change of legal residence, under the provisions of Chapter III, Section 3, of the By-Laws:

Eight from Middlesex South to Suffolk.

1. Branch, Charles Franklin, Allston.
2. Breed, William Bradley, Chestnut Hill (Newton).
3. Clay, Charles Lancaster, Auburndale.
4. Fitchet, Seth Marshall, Newton Center.
5. Hiebert, Joelle Carnelius, Belmont.
6. Newton, Francis Chandler, Newton Center.
7. O'Halloran, William Timothy, Newtonville.
8. Simmons, Channing Chamberlain, Chestnut Hill (Newton).

Three from Norfolk to Suffolk.

1. Homans, John, Brookline.
2. Preble, William Emerson, Brookline.
3. Rockwood, Ethel May, Roxbury.

One from Suffolk to Norfolk.

1. Spitz, Jacob, Mattapan.

One from Worcester North to Worcester.

1. Bassow, George Joseph, Athol.

DAVID N. BLAKELY, *Chairman.*

REPORT OF COMMITTEE ON MEMBERSHIP AND FINANCE, ON FINANCE

Your Committee recommends

1. That a special appropriation of $200.00 be made to cover the expenses of the Campaign of Education, conducted by the Committee on Cancer, during the last week of April, 1928, known as "Cancer Week". This is in accordance with the vote of the Council at its last meeting.

2. That a special appropriation of $250.00 be made to cover the expenses of the survey of the incidence of puerperal septicemia in Massachusetts in 1927 which has been made by the Section of Obstetrics and Gynecology and the expense of 1000 copies of a reprint of the group of twenty-nine articles on obstetrical problems which have appeared in our MEDICAL JOURNAL, these reprints to be distributed under the direction of the Section.

DAVID N. BLAKELY, *Chairman.*

The Secretary read the reports of the committees appointed by the Council in February to consider the petitions of the following five Fellows to be restored to the privileges of fellowship: Harold E. Diehl, Harry L. Roberts, C. Norbert Brady, Thomas J. Cahill, Perry E. Joslin, and it was voted to accept them and to restore the petitioners under the customary conditions. The report of the committee appointed at the same time to consider the petition of Horace G. MacKerrow, for restoration to the privileges of fellowship, namely that it did not recommend his restoration, was accepted by vote. The following petitions to be restored were read by the Secretary and committees appointed to consider them respectively:

For T. F. Grady	J. A. Bedard W. T. Hopkins Butler Metzger
For E. F. Pope	D. D. Scannell John Homans Malcolm Seymour
For Charles Dudley	L. B. Reed W. G. Brown N. K. Noyes

Dr. David Cheever read the report of the Standing Committee on Ethics and Discipline and it was accepted. (See Appendix No. 1.) Dr. J. Forrest Burnham read two reports, one for the Committee on Medical Education and Medical Diplomas and one as a delegate from that committee to the annual Congress on Medical Education, Medical Licensure and Hospitals of the American Medical Association at Chicago last February. Reports accepted. (See Appendix No. 2.) Dr. Shields Warren read the report of the Committee on State and National Legislation and it was accepted. (See Appendix No. 3.) The report of the Committee on Public Health was presented by Dr. Victor Safford. (See Appendix No. 4.) He spoke of the changes that might be coming in the teachings concerning the transmissibility of ultraviolet light by different tissues and of the dangers that the use of violet light lamps might cause.

He called attention to two books published during the last year which he had found most interesting and useful, namely: "Ultraviolet-therapy", a publication of the Burdick Corporation, a carefully written and concise exposition of the generally accepted theories with reference to the application of light therapy; also "Clinical Application of Sunlight and Artificial Radiation", by Dr. Edgar Meyer, published by Williams and Wilkins Company, of Baltimore. This book has a large bibliography and is a good summary of the subject. Dr. Safford's report was accepted. Dr. Homer Gage presented the last report of the Committee of Nine, which has been in charge of the *Journal*, that committee being replaced by the new Committee on Publications, as defined in the Revised By-Laws. The report was accepted. (See Appendix No. 5.) The Secretary read the report of the Committee on Cancer and it was accepted. (See Appendix No. 6.) Dr. A. G. Rice read the majority report of the Committee on Insurance, signed by himself and by Dr. C. A. Sparrow, and Dr. A. H. Crosbie presented a minority report. (See Appendix, Nos. 7 and 8.) In the discussion which ensued the minority report, which favored supporting exclusively the United States Fidelity and Guaranty insurance company, was approved by Dr. E. H. Stevens and Dr. J. A. Mehan and opposed by Dr. J. H. Lambert. On the question of accepting the majority report, the motion to accept was lost by a standing vote of 52 in favor and 63 against. On motion by Dr. Stevens it was voted that the minority report be accepted and that the committee be continued in office. On motion from the floor, duly seconded, it was voted at 1.45 o'clock p. m. to recess for half an hour for luncheon.

The Council came to order at 2.15 o'clock p. m. and Dr. C. E. Mongan reported for the Committee on establishing a branch of the Woman's Auxiliary of the American Medical Association in Massachusetts. (See Appendix No. 10.) Dr. Mongan explained that the object of the Auxiliary is to extend the aims of the medical profession through the wives of physicians; that in order to organize a branch the President of a State Medical Society appointed "the capable wife" of a physician to assist the organizer of the national association in calling together the wives of the physicians who are attending a given meeting. If they vote to organize an Auxiliary the proper officers are elected. Dr. Mongan's report was accepted and its recommendations adopted. Dr. W. P. Bowers reported for the New England Medical Council, calling attention to the fact that the records of this organization have appeared in the JOURNAL; that the Council meets twice a year and that its meetings have been well attended by representatives of all of the New England state medical societies; that certain recommendations have been placed in print and submitted to medical schools, as well as to the medical societies, and that therefore, it is expected in the immediate future to get the New England Medical Examining Board to come to some coöperative action with reference to reciprocity throughout the New England states. Report accepted. Dr. W. G. Curtis read the report of the Committee on Clinics and Health Associations. (See Appendix No. 9.) Motion was made and duly seconded to accept the report with its resolution. Dr. J. H. Lambert opposed the motion on the ground that a majority of the committee had never been assembled, and that the report contained no specific charges as regards any particular clinics. He knew of no flagrant abuses in the Middlesex North District. Dr. Curtis thought that voting by mail was parliamentary and quoted a passage from "Robert's Rules of Order" in support of his contention. Dr. C. G. Miles spoke at length in support of the report and on the abuse of clinics in the Plymouth District as did Dr. F. A. Bragg, Dr. T. H. McCarthy, Dr. J. J. McNamara and Dr. J. P. Shaw. Dr. David Cheever recited his experiences with certain members of Plymouth District last year as chairman of the standing Committee on Ethics and Discipline, when said members had objected to the professional behavior of a Fellow in that District. This was previous to the appointment of the Committee on Clinics and Health Associations by the Council. The Chair pointed out that the resolution at the end of the report was not drastic in character, asking only that members be guided by the rules of the District society and that charges submitted by the secretary of a District in writing be investigated. An amendatory motion from the floor that the report lie on the table and the committee be continued in office was seconded by Dr. Lambert but not accepted by Dr. Curtis. This motion was lost by a voice vote and the original motion to accept the report was adopted. Dr. T. J. O'Brien read the report of the Committee on a Permanent Home for the Society. (See Appendix No. 11.) It was discussed by Dr. R. E. Stone, Dr. Cheever and Dr. S. B. Woodward. On motion by the last named the wording of motion No. 5, at the end of the report was amended to read: "That the committee be given power to rent temporary headquarters for the Society", in place of, to "secure" temporary headquarters. The report as amended was accepted.

On proceeding to a consideration of the Revised By-Laws, a draft of which had been sent to every councilor, Dr. Woodward moved, and it was voted unanimously, that the Revised By-Laws be approved as printed and distributed.

The Nominating Committee brought in the following slate: For President: Dr. John M. Birnie of Springfield; for Vice-President: Dr. Peer P. Johnson of Beverly; for Secretary: Dr. Walter L. Burrage of Brookline; for Treasurer: Dr. Arthur K. Stone of Framingham Center; for Orator: Dr. George C. Shattuck of Boston.

No other nominations having been made from the floor ballots were distributed, marked, collected and counted and the President announced that the slate had been unanimously elected. The Chair nominated and the Council elected the appended committees for the year 1928-1929:

STANDING COMMITTEES

OF ARRANGEMENTS

James Hitchcock, E. P. Hayden, H. Q. Gallupe, T. H. Lanman, F. H. Colby.

ON PUBLICATIONS

Homer Gage, J. W. Bartol, R. I. Lee, R. B. Osgood, E. W. Taylor.

ON MEMBERSHIP AND FINANCE

D. N. Blakely, Algernon Coolidge, Samuel Crowell, Gilman Osgood, Homer Gage.

ON ETHICS AND DISCIPLINE

David Cheever, W. D. Ruston, S. F. McKeen, Kendall Emerson, A. C. Smith.

ON MEDICAL EDUCATION AND MEDICAL DIPLOMAS

P. P. Johnson, A. G. Howard, R. L. DeNormandie, H. P. Stevens, C. H. Lawrence.

ON STATE AND NATIONAL LEGISLATION

The President, A. W. Marsh, T. J. O'Brien, F. E. Jones, Shields Warren.

ON PUBLIC HEALTH

Dwight O'Hara, E. F. Cody, R. I. Lee, T. F. Kenney, F. G. Curtis.

ON MALPRACTICE DEFENCE

F. G. Balch, E. D. Gardner, F. B. Sweet, R. P. Watkins, A. W. Allen.

SPECIAL COMMITTEES

COMMITTEE ON THE NEW ENGLAND MEDICAL COUNCIL

James S. Stone, W. P. Bowers, Kendall Emerson, B. W. Paddock, the President.

COMMITTEE FOR THE PREVENTION AND CURE OF CANCER

Robert B. Greenough, F. G. Balch, P. E. Truesdale, Kendall Emerson, G. H. Bigelow.

COMMITTEE ON INSURANCE

A. G. Rice, C. A. Sparrow, A. H. Crosbie.

COMMITTEE TO COÖPERATE WITH THE MASSACHUSETTS BAY TERCENTENARY INC.

F. A. Washburn, G. H. Bigelow, E. C. Streeter, W. P. Bowers, John Warren.

Dr. E. A. Bates moved that the Section of Hospital Administration be revived and that a chairman and secretary for the meeting of 1929 be appointed by the Chair. This was seconded. Dr. H. G. Stetson thought a standing committee on the same subject preferable to a section. The motion was lost on a standing vote of 18 in favor and 21 against. Dr. F. S. Smith spoke on the operation of the Workmen's Compensation Act, the interest it had excited in the five District societies of Middlesex and Essex and introduced the following resolution and four motions:

Resolved: That as there is apparently a strong sentiment held by many physicians of the Massachusetts Medical Society, that hospitals caring for patients protected by the Workmen's Compensation Act, should be paid a cost rate of maintenance, and that some staff physicians who care for these patients should be allowed to charge for their services, and as the Industrial Accident Board has, in a recent decision, maintained its position denying the justice of these principles:— Therefore, be it voted by the Council of the Massachusetts Medical Society:—

1. *That* a committee be created to investigate the Workmen's Compensation Act, particularly in its application to hospitals and hospital staffs.
2. *That* this committee shall consist of one member from each District Society, appointed by the Presidents of the respective District Societies, with the Assistant to the President acting as Vice-Chairman.
3. *That* this committee shall be authorized, with the approval of the Committee on Membership and Finance, to expend such money from the treasury of the parent society, as may be required to obtain legal or other advice, needed to assist in the investigation.
4. *That* this committee shall report its findings and recommendations to the Council at the next quarterly meeting, or as soon thereafter as is possible.

The resolution and motions were discussed by the Chair who pointed out that the whole question of Workmen's Compensation had received thorough treatment by the Recess Committee of the Legislature last year, that the law was made by the General Court and that unless it can be changed no results can be obtained. Dr. S. B. Woodward, the only medical man on the Recess Committee said he was opposed to a general cost rate of maintenance; he had done what he could to raise the general rate of pay, which had been too low; he explained how difficult it is to find out the rates in many hospitals and therefore it is impossible to determine on any definite rate of pay, each hospital settling the matter with its staff. On motion by Dr. J. Forrest Burnham, duly seconded, the privileges of the floor were voted to Dr. W. H. Merrill of Lawrence, a former councilor, who discussed the Workmen's Compensation problem from the standpoint of many years' study. He thought it a matter which rested between the hospital trustees and their staffs; the trustees have no right to use money which has been contributed for charity as compensation. Now and then the Industrial Accident Board has intervened between the trustees and their staffs. He thought that the formation of a committee would keep the question alive and crystallize the opinion of the profession. The resolution and motions were seconded by Dr. A. W. Dudley and they were passed by a voice vote.

On motion by Dr. L. R. Bragg it was voted to recommend to the House of Delegates of the

American Medical Association that two retired Fellows of the Massachusetts Medical Society, namely Dr. Olney Windsor Phelps, of Warren and Dr. Elisha Shepard Boland, of South Boston, be made Affiliate Fellows of the American Medical Association under the terms of the By-Laws of that association. Dr. W. P. Bowers spoke about the committee formed to find out the cost of medical care, headed by Dr. Ray Lyman Wilbur; how desirable it is to determine the facts in such an important economic subject. The committee would need much money to prosecute their campaign; already it had published a pamphlet which sketched out the whole field to be covered. He moved: That the Committee on Membership and Finance shall consider the advisability of recommending an appropriation of five hundred dollars to be paid to the Committee on the Cost of Medical Care and shall include its decision in the report to be submitted to the Council at the stated meeting in February, 1929. On being put before the Council the motion was passed.

The Chair called attention to a letter received from John Jackson Walsh, chairman of one of the committees of Massachusetts Bay Tercentenary Inc. as regards having the coöperation of the Massachusetts Medical Society in arranging a suitable exhibition of hospitalization methods at the tercentenary. The Chair nominated and the Council appointed the following committee to act in coöperation for such a purpose: F. A. Washburn, G. H. Bigelow, E. C. Streeter, W. P. Bowers, John Warren. The following vacancies were filled by vote: L. B. Reed, Plymouth, as Censor and C. H. Colgate as Commissioner of Trials, for the Plymouth District, and C. L. Curtis as Censor for the Essex South District.

Adjourned at 4.13 p. m.

WALTER L. BURRAGE, *Secretary.*

APPENDIX TO THE PROCEEDINGS OF THE COUNCIL

NO. 1

REPORT OF THE COMMITTEE ON ETHICS AND DISCIPLINE

The Committee held five meetings during the year, and its sub-committees held numerous conferences and investigations. The matters brought before the Committee were of the usual type but were both more numerous and on the whole of more serious character than usual. Indeed it seems to the Committee that whether due to the changing spirit of the times or to the increase of alien elements in the profession, the ethical standards of physicians are tending to seek a lower level. No fewer than four Fellows were recommended to the President for expulsion from the Society. In three of these cases it has been recommended that their resignation be accepted in order to avoid the useless expense and the notoriety connected with a board of trial. These were all instances of the performance of or the attempt to perform illegal abortions. The fourth case is that of a Fellow who in a suit for malpractice against a fellow-member, in his testimony for the plaintiff made statements not justified by the facts and expressed opinions which were not in accordance with medical experience or teaching. His license to practice was revoked by the Board of Registration in Medicine. This man has tendered his resignation but he has been recommended for expulsion and doubtless the appointment of a board of trial by the President will follow in due course. The conduct of another Fellow whose license to practice has been revoked by the Board of Registration has been the subject of prolonged and careful investigation by the Committee. The charges against him are of immoral conduct in his professional relations with a woman patient and it has been recommended to the President that he be asked to resign but the execution of this has been suspended since the Committee has learned that further evidence may be forthcoming.

Charges of unethical advertising have as usual occupied a great deal of the Committee's time and have presented the usual perplexing problems. One of the abuses which is creeping into the ethical practice of medicine is due in part to the employment by charitable hospitals and clinics of professional promoters of campaigns or "drives" for the collection of money. These professional managers, not being themselves physicians, are actuated by the standards of commerce rather than by those of a liberal profession. They are likely therefore to employ methods of publicity and advertising which are offensive to the traditional standards of our profession. Pictures of physicians are printed in the daily newspapers representing individual members of the Staff of these institutions in the performance of their merciful duties, and articles extolling the professional work of these physicians are published, as a recommendation to the public of the merit of the institutions which these gentlemen serve. Such publicity methods, in these instances wholly ethical and proper in their purpose, are pointed to with justice by other members of the Society when they are called to account for similar advertising of a more personal character. If great charitable institutions permit such advertising of the achievements of their professional Staffs and this is condoned by the Massachusetts Medical Society it cannot be expected that the similar but less conspicuous violations of our traditions on the part of individual Fellows, shall be controlled by the authority of the Committee on Ethics and Discipline. The professional Staffs and Superintendents of medical charities should not permit themselves to be thus exploited by the lay-trustees of the institution or by professional managers of campaigns for the securing of endowment.

If the Massachusetts Medical Society wishes to change its traditional attitude about advertising and to loosen or relax the principles which have always governed its members, a new policy must be formulated by the Society and communicated to the Committee on Ethics and Discipline for its guidance.

A somewhat novel problem has been presented by the appointment by certain small hospitals throughout the Commonwealth whose Staffs are "open", of a supervising physician or surgeon who is charged with the duty of overseeing and if need be of criticizing the work of his professional colleagues of the community who may have private patients in the hospital with a view of insuring that all the work done in the hospital shall reach a certain standard of excellence. If such a supervisor is a man of ability and performs his duties conscientiously it seems clear that the good of the patients is served but it is also clear that such supervision appears to be meddlesome and offensive to the physician whose patient is the subject of investigation. Certainly in private practice such a relation of physicians would not be tolerated and the fact that the Staff is "open" rather than organized according to seniority or authority makes this relation as difficult as where

the patient is ill in his own house. It is clear that where this arrangement exists it should be made amply clear by the governing authorities at the hospital that any physician who has a private patient there must expect to have his work overseen by the physician appointed as supervisor. It is also clear that in the exercise of his duties the supervisor must be governed by the greatest tact and consideration of the feelings of his brother-physician. Any other attitude would lay him open to the charge of a violation of the traditional mutual relations of Fellows of the Society.

Numerous complaints and personal differences arising between physicians in the course of their practice have been referred to the Committee and the disputes reconciled or adjusted so far as possible. In some instances the matter has been referred to the President with the recommendation that he admonish a physician for conduct which verges on the unethical.

An important problem concerning the alleged unethical conduct of a free clinic which was before the Committee last year was turned over to the new Committee on Clinics authorized by the Council at its meeting in October and doubtless will be the subject of a report by that Committee.

Some complaints which have been made before the Committee have defied solution since the Committee has no Solomon among its members and is not empowered to employ his methods. In such cases and many others in which, although abuses exist, no ground is found for action, the Committee feels and hopes that it performs a useful function in reminding the Fellows involved that the Massachusetts Medical Society has certain standards of conduct for its Fellows and proposes through its Committee to try to maintain them.

It is a source of satisfaction to be able to report that a physician, recently charged and under indictment for the performance on a woman of an illegal operation, with a fatal result, whose action was called to the attention of the Committee, was found to be now not a member of our Society due to the fact that his resignation was secured by the Committee on Ethics and Discipline four years ago for a breach of our ethical code which was the logical antecedent of his present misconduct.

Throughout the year the Committee has frequently found it useful or necessary in the performance of its duties to consult with the Board of Registration in Medicine, whose records have been freely placed at our disposal. The Committee wishes to make grateful acknowledgment of the courtesy and coöperative spirit shown by the Board of Registration in this respect.

The Chairman in closing this report wishes to acknowledge the conscientious devotion of much time and strength on the part of all the members of the Committee to the performance of its duties—duties which, to say the least, are neither inspiring nor pleasant.

DAVID CHEEVER, *Chairman.*

NO. 2

REPORT OF THE COMMITTEE ON MEDICAL EDUCATION AND MEDICAL DIPLOMAS

A part of the work of the Committee has been the examination, for the purpose of recognition, of 26 diplomas from physicians desirous of appearing before the various Boards of Censors, the diplomas being from schools not on the accepted list of Medical Schools, as approved by the Council. The Committee has also worked in conjunction with the Council on Medical Education and Hospitals of the American Medical Association on such Massachusetts matters as came under its jurisdiction.

Our Committee now submits a plan for a new activity which, with the Council's consent, it will endeavor to consummate. We feel that there is a plan coming within the field of Post Graduate Instruction by which the Fellows of this Society can be assisted.

It is proposed that during the coming summer a list of clinical subjects of interest to physicians will be arranged, and a corresponding list of physicians compiled. These physicians will be selected as competent to instruct in the subjects which are listed. The physicians will be asked to go about the State at the request of presidents, secretaries and executive committees of District Medical Societies and speak upon the especial subject upon which they are fitted. There will be an attempt to obtain the best talent and to present it in a systematic manner, with as many late adjuncts for the purpose of instruction as possible, with the hope that definite, useful and up-to-date information may be available to physicians who are brought to the meeting centres of each District Society. It is possible that out-of-the-State men occasionally may be available as speakers. This service may be extended even to local clubs, which are usually composed of Fellows of this Society. It is proposed to pay the travelling expenses only, to those speakers who will accept such. The unexpended balance in the Committee's 1928 appropriation will suffice probably to use until the 1929 budget is made, when the Committee will again report to the Council. This plan of Post Graduate Instruction is not new, but only in its application by this Committee. The Committee asks the support of the Council and Fellows generally in the interest of medical progress. Suggestions from the Council will be welcomed.

This part of the annual report of your Committee on Medical Education and Medical Diplomas is the Chairman's report as a delegate from the Massachusetts Medical Society to the twenty-fourth Annual Congress on Medical Education, Medical Licensure and Hospitals, at Chicago, February 6-8, 1928, under the chairmanship of A. D. Bevan, M.D., of Chicago, and under the auspices of the Council on Medical Education and Hospitals of the American Medical Association. T. J. O'Brien, M.D., Vice-President, was present as a co-delegate for the Massachusetts Medical Society. There were twenty-eight papers presented, and since the detailed reports, with discussions, were printed in the *Journal of the American Medical Association* in the six issues March 10 to April 14, and are available to all, no attempt will be made here to present an exhaustive review, but it is proper to mention a few items of value.

The papers of Drs. Bevan, Bardeen, Cutter and Bell, and that of Sir Walker of Edinburgh, and also that wonderful posthumous letter of Dr. Francis W. Peabody of Boston which has been so properly captioned by his friends, "The Soul of the Clinic," may be found in the above mentioned issues.

Dr. Bevan's opening paragraph is as follows: "I am sure that it will be interesting and profitable to review the changes that have taken place in medical education in America in the last 25 years, the result of the effort made by the organized profession of this country, the American Medical Association, to elevate the standard of medical education, and place it on a thoroughly sound and satisfactory basis. This whole movement owes its success primarily to the thorough reorganization of the American Medical Association, which in 1901 converted the Association into an effective representative body covering the entire country, and the entire medical profession, functioning through a house of delegates which

meets annually, and through a board of trustees and executive officers who function throughout the year. To no one man is more credit due for bringing about this great reorganization than to Dr. George H. Simmons, Editor Emeritus."

As an observer from Massachusetts for a long period, the Chairman of your Committee can heartily endorse Dr. Bevan's praise of Dr. Simmons, and it is certain that the same grade of service to our profession was rendered by him up to his retirement, four years ago. To Dr. Bevan also the kindest words of commendation are due, for his vision, good judgment and energy in bringing about the great improvement in medical education in the United States. It will be remembered that our own Dr. W. T. Councilman was a member of the Council in its early days and for a period thereafter.

The medical schools of New England have felt the influence of the change in medical progress and particularly Dartmouth and the Medical School of Maine. Yet it is not perhaps too chimerical to hope that the future may find the former granting the degree of M.D., and the latter functioning as a two-year Class A school. Apparently suitable endowments could accomplish this laudable purpose.

The crowning recommendation conveyed by Dr. Bevan's paper was for the continuation of the coöperation among the medical schools, medical profession and the friendly foundations, to the end that the general practitioner and those doing special work shall be made fully qualified to treat the sick, in the home or in the hospital.

Dr. C. B. Kelley of New Jersey made it plain in his paper that any State having a composite board of registration has no need of Basic Science Laws, even such a good one as has been passed recently in Connecticut. Dr. Davison of the Dukes University, North Carolina, advocated that a medical degree could be awarded properly in five years following high school. He would accomplish this by matriculating selected students only, and further by substituting three terms of forty-four weeks, in place of four terms of thirty-two weeks. The faculty of Tulane University Medical School of Louisiana will put this method into effect as soon as the permission of the board of administration is obtained. This is, as you will note, conducting a high grade medical school through the summer in a far southern State.

In a paper written by Dr. Davis, of the Census Bureau, all physicians are asked to employ the Standard Nomenclature of Diseases published by the Bureau, since the sooner we can arrive at a standard of names for diseases and causes of death, the sooner we can attack them intelligently, in proportion to their importance, statistically found.

Dr. Bardeen's paper quotes the result of a recent study by our newly organized Commission on Medical Education, of which Dr. Rappleye is secretary, that 90 per cent. of all sickness can be cared for by a good general practitioner. This fact is encouraging to us all. Dr. Bardeen describes the method of teaching during the fourth year in the Medical School of the University of Wisconsin, as entirely clinical. It begins July 1 and extends for 48 weeks, during which the student is farmed out, so to speak, among various hospitals, clinics and general practitioners, the last after the pattern of years ago when the medical student drove about with the family physician and learned medicine in that way. In his paper he quotes the written word of the satisfied student who has followed this plan. This satisfaction works two ways, since the physicians found themselves doing better work in the company of the intelligent student and even profiting by the contact. This situation is not unknown in Massachusetts hospitals with good internes, under similar circumstances.

The next set of papers constituted a symposium on autopsies that was very interesting. In this connection it is to be noted that the Council on Medical Education and Hospitals has decided that from now on, 10 per cent., and on January 1, 1929, 15 per cent., of all hospital deaths shall be followed by post mortems, in order that the name of a hospital shall continue to be listed among those approved for internes.

Dr. Bell of the University of Minnesota, in his paper upon the method of obtaining autopsies, made these four statements:

1. The most important factor in increasing the number of autopsies is to get the physicians deeply interested.
2. The administrative agencies of the hospital can secure a fair percentage of post-mortems if they really try to do it.
3. Public sentiment favoring necropsies can be built up in a community if a majority of the physicians coöperate.
4. If undertakers are given helpful and considerate treatment, the great majority will not object to post-mortem examinations.

During the discussion, mention was made that it was common to procure from 30 to 50 per cent. of autopsies, even without a special drive, and in a personal communication from a former Boston physician now in charge of a New York hospital, a figure of 80 per cent. was given.

In the paper by Dr. Zapffe of Chicago, Secretary of the Association of American Medical Colleges, he favored a lessening of specifications of hours and subjects required to be taught by medical schools, and now found in the rules of boards of registration. His reason was that good schools desire a chance to develop plans of instruction which are aimed to produce the kind of graduates in medicine who will not only be able to pass examinations creditably, but who will develop into the highest type of medical man. Dr. Zapffe mentioned the results of two studies made by his body, one relating to finance and one to personnel. It was found that during one year the Class A medical schools had a budget of $12,000,000, of which the students furnished $4,000,000, and that the balance of $8,000,000 came from other sources. This throws light upon the financial side of medical education.

Referring to the item of personnel, it has been noted in Massachusetts, and elsewhere, that, combined with arguments which have been made to support the claim that inferior schools were still needed, to accommodate individuals desiring to pursue the study of medicine, the following smoke screen has annually appeared: namely, that there was a large number of applicants for matriculation which the Class A schools could not accommodate, and, locally speaking, that there were several hundred who were denied admittance to our three A schools. Now Dr. Bevan in his opening address made it plain that the present A schools can be made to care for the number of well-trained men which are needed in the United States. In view of the above, the figures furnished by Dr. Zapffe are illuminating and are quoted verbatim:

"Two years ago, when the work was begun, in round numbers, 20,000 applications were made to Class A schools in the United States and Canada, by 8,500 persons. The highest number of applications made by a single person was 19. Of the 8,500, 5,500 were accepted, and of those 5,500 4,000 entered the freshman class. We followed up the 3,000-odd who failed to be accepted, to find out what they did, because our prime object was to know whether those fellows continued to prepare themselves to enter a medical school and would apply again next year, or whether they gave up the idea of studying medicine entirely, or whether they were going to a chiro-

practic or osteopathic or some other cult school. That study is not quite finished yet, but in the main shows that a large number of the 3,000 continued to prepare themselves to apply next year. Some of them finally succeeded in getting into a school that same year. The study for this year shows that nearly 25,000 applications have been made for admission by nearly 11,000 individuals. Of the 11,000, about 8,000 were accepted. There are enrolled in the freshman class this year 6010. These figures can be used as an argument against the danger of a shortage of physicians. One student applied to 37 schools and failed to get in. Two students applied to 27 schools and finally got in. There were 124 students who applied to 10 or more schools before they finally got in, and it is rather interesting that they did not all start at the top and work down, going to the strongest first. Some of them worked up and got into some of the best schools in the country after as many as 12, 13, 14 or 15 trials. We have the data as to why the rejections were made, whether the class was full or because of insufficient requirements, etc."

In closing this report, it is proper to recall that for many years the Massachusetts Medical Society, through nomination by the President and election by this Council, has been represented at this Annual Congress, at which the vital problems of medical education have received the important consideration they deserve.

J. Forrest Burnham, *Chairman.*

NO. 3

Report of the Committee on State and National Legislation

Owing to the fact that the Legislature is the same body as last year the duties of the Legislative Committee have not been as arduous as usual. Dr. James Stone has been of great assistance to the Committee.

Dr. Woodward's bill to extend compulsory vaccination to the pupils of private schools was introduced by Representative Washburn. Three bills were introduced for Dr. Padelford designed to nullify the present vaccination law. Inasmuch as the Senate was the same body as that which defeated our vaccination bill last year it seemed unwise to the Committee to press the bill this year, and an agreement was reached whereby all bills for and against vaccination were withdrawn.

A bill was introduced at the instance of the Dean of the Massachusetts College of Osteopathy to provide for a separate board of registration for osteopaths. At the hearing this was opposed by representatives of the Massachusetts Osteopathic Society and by the State Board of Registration in Medicine. Members of this Committee believed it was unnecessary for them to speak in opposition to the bill which was given leave to withdraw.

An attempt was made to nullify the present statutory limitation in malpractice suits by inserting the words "or becomes known". This could be susceptible to almost any interpretation, even permitting suit to be brought twenty or thirty years after the alleged malpractice had been committed. This bill was opposed by the Joint Committee on State and National Legislation of the Massachusetts Medical Society and the Homeopathic Medical Society, by the Massachusetts Osteopathic Society, by the Massachusetts Dental Society, and the insurance interests. The bill was given leave to withdraw.

The other bills dealing with medical matters introduced were of minor interest and no formal action by the Committee was taken on them. Adhering to its policy of restricting its activities largely to State legislation the Committee left the initiative in dealing with matters of national legislation to the Bureau of Legal Medicine and Legislation of the American Medical Society.

The Committee earnestly protested against the recommendation of the Senate Finance Committee to increase the Harrison Narcotic tax from one dollar to three dollars. The tax was finally maintained at the one dollar rate.

The Committee also protested against the discrimination shown by the Treasury Department in refusing to allow physicians to deduct from their taxable income the expenses incurred in attending scientific meetings. Unfortunately this injustice was not corrected.

In preparation for the re-introduction of the compulsory vaccination bill into the new Legislature next year a circular letter was sent out to each member of the auxiliary committee requesting his help in ascertaining the attitude of candidates for the Legislature to this bill. It was voted to authorize action by the secretaries during the summer months to forward the cause of compulsory vaccination of children attending private schools.

The Committee was informed that Dr. Charles P. Sylvester, Chairman of the Board of Registration in Medicine, proposed to introduce a bill which provides for the annual registration of physicians. The Committee voted to endorse the principle of this bill, reserving action on the bill itself until its details are known.

Shields Warren, *Secretary.*

NO. 4

Report of the Committee on Public Health

The Committee on Public Health has held monthly meetings as usual during the past year. Several matters coming before the Committee for its consideration have been the subject of recommendations which have already been acted upon by the Council.

The time and attention of the Committee has, however, been devoted chiefly to a continuation of its efforts to secure information which might promote knowledge of the therapeutic usefulness of ultraviolet lamps, so-called.

In the *Boston Medical and Surgical Journal* for February 9, 1928, there was published an article* prepared for the Committee by Professor W. T. Bovie and which was especially intended to show the proportion of the radiations of the shorter wave lengths given off by a mercury-vapor lamp under different conditions, common causes for variations in the character of the radiations from the lamps, the difficulty of determining by mechanical devices the proportion of radiations of various wave lengths, and the impracticability, in the present state of our knowledge, of attempting to regulate physiological action by instrumental methods.

In the same number of the *Journal* there was reproduced at the request of the Committee a report of the United States Bureau of Standards showing the results of experiments intended to determine the varying degree of transmissibility to ultraviolet rays of different kinds of glass.

It has become apparent to the Committee in its work in this field during the last two years that progress in the biophysics of light is being hampered by imperfections in the present state of our knowledge regarding the purely physical aspect of the subject. Even regarding the matter of the measurement of the transmissibility of glass to ultraviolet rays it may be noted that the U. S. Bureau of Standards

*The comparative efficiency of sources of radiation used in therapy. Prof. W. T Bovie, Boston Medical and Surgical Journal, Feb. 9, 1928, Vol. 197, No. 32.

Report† appearing in the JOURNAL was issued by the Bureau after two previous reports given out on the same subject had been admitted to be erroneous.

The results of the past year's work do not warrant the Committee in changing the conclusions which we stated a year ago regarding the use of ultraviolet lamps.

As was then stated, ultraviolet lamps have undoubtedly a field of therapeutic usefulness. The application of the radiations from such lamps for the treatment of disease has as yet made comparatively little advance beyond the empirical stage.

The lamps are capable of producing harmful as well as beneficial effects.

For the above reasons the Committee still insists that their use should always be under the supervision and control of the Medical profession.

VICTOR SAFFORD, *Chairman.*

NO. 5

REPORT OF THE COMMITTEE OF NINE

The past year has been eventful in the history of the NEW ENGLAND JOURNAL OF MEDICINE.

The outstanding points of interest are first the acceptance of the proposition made to the New Hampshire and Vermont State Medical Societies for the publication of the proceedings of these bodies. The first appearance of the New Hampshire material was in the issue of October 6, 1927, and that of Vermont in January 26, 1928. We are giving space once each month to these societies. This departure from our regular routine has seemed to be satisfactory to these two societies and we believe is of influence in welding some, and later perhaps all, of the New England States into the scheme of maintaining a journal representing the medical profession of this section of the country.

The second matter of large interest was the change of name of the *Boston Medical and Surgical Journal* to that of the NEW ENGLAND JOURNAL OF MEDICINE. There were and are differences of opinion with respect to the propriety of this change. Almost universal regret was felt that the title which had stood for one hundred years of medical journalism sponsored by eminent men in Boston should be discarded, but the ambition to increase the usefulness of the JOURNAL together with the possibility of an amalgation which would strengthen medical interests in the New England States led the Committee in Charge to authorize the adoption of the present title.

The completion of one hundred years under the former name and embarkation under the new designation seemed to warrant recognition by the Massachusetts Medical Society. This took the form of an evening dinner with post prandial speaking. All members of the Society, editors of other medical journals and several prominent physicians were invited to attend this banquet. An enjoyable evening followed and the exercises are matters of history. Very general interest in the history of the JOURNAL was shown by letters from many who were unable to attend, together with cordial wishes for future success.

Evidence of the desire of medical authors to have their productions appear in this JOURNAL is shown by an excess of original articles submitted much beyond our capacity although we are quite regularly publishing more articles than in any previous year. For example, the number of articles published in the first five months of 1928 was 143, while 94 were published in the corresponding period for 1927. There were 1124 pages published in the same period, which is 232 in excess of the record of last year.

The average circulation is larger than ever before in the history of the JOURNAL and this has seemed to warrant an increase in our advertising rates by five per cent.

Another gratifying condition is found in a more prompt return to our average circulation after the annual revision of the mailing list to conform to the paid-up annual dues. This may mean some credit to the JOURNAL as well as a desire of the Fellows to maintain standing in the Society.

Since the fiscal year closes December 31 of each year it is impossible to give an exact financial statement, but it may be pertinent to mention that one large expenditure, that of about a thousand dollars, is paid out of the appropriation for the JOURNAL for the publication of the Directory.

It is perhaps proper to call attention to some of the difficulties under which we labor. The location of the JOURNAL quarters is not suited to the work performed because of the disturbing noises of busy adjacent streets and on the other side a large trunk line railroad. In warm weather the noise often prevents the use of open windows. The rooms for committee work of the Society are inadequate. Not infrequently officers or committees find themselves in competition for the only available room for Society business.

Probably few persons have any realization of the complicated nature of the business and editorial details of publishing a weekly journal. In addition to the routine work of the office much time has to be devoted to giving opinions and facts to many desiring advice or information. Fortunately we have a staff which is always ready with advice and editorial material. The office force is loyal to the last degree and is called upon to work overtime much too frequently.

Assistance is rendered to officers and committees of the Society as desired.

If the plans inaugurated by the President for adequate quarters for the Society are successful the JOURNAL force will be able to perform its duties with more comfort and efficiency.

HOMER GAGE, *Chairman.*

NO. 6

REPORT OF THE COMMITTEE FOR THE PREVENTION AND CURE OF CANCER

The above Committee has the honor to make the following report. Application was made to the Council for an appropriation of $200.00 to defray expenses in connection with the State Cancer Campaign which was conducted jointly, during the week of April 23-28, 1928, by the Massachusetts Branch of the American Society for the Control of Cancer, the State Department of Public Health, and by this Committee of the Massachusetts Medical Society.

Physicians from other states who spoke before meetings of district societies included Dr. Francis Carter Wood of New York, Dr. Howard Canning Taylor of New York and Dr. Joseph C. Bloodgood of Baltimore. Meetings were held by fourteen of the eighteen district societies in connection with this campaign, and members of the Massachusetts Medical Society participated also in meetings of smaller medical societies as well as in the public meetings.

A detailed report of the campaign is being prepared for publication, but it may be said that the most cordial coöperation was received from the district societies and that the campaign is generally regarded as one of the most effective that has yet been conducted in this community.

ROBERT B. GREENOUGH, *Chairman.*

†U. S. Bureau of Standards Report—"Ultra Violet Transmission through glass." 1928.

NO. 7

Report of the Committee on Insurance

In the past year some pertinent facts about malpractice insurance have been uncovered.

First, there are to-day only three companies issuing this form of insurance in Massachusetts, all others ceasing so to do because they had found the business unprofitable. Of these three companies two, The U. S. Fidelity & Guaranty Co. and The Hartford Accident & Indemnity Co., are old line, general insurance companies, heavily capitalized, issuing many forms of insurance; the third, The Medical Protective Co., is much younger, is capitalized for less, and issues only one kind of insurance, physicians' liability. The Hartford Accident & Indemnity Co. is not anxious for this kind of business and makes no active effort to get it; the other two want it and solicit it. From many and reliable sources it can be truthfully said that, allowing for differences in capitalization, all three companies are, in general, equally sound financially, are rated equally high, are all equally reliable, all afford equal protection, and all render equally efficient service. The U. S. Fidelity & Guaranty Co. and The Hartford Accident & Indemnity Co. issue physicians' liability policies the premiums for which are graded according to the risk experience for different medical specialties, and this grading is practically the same by each company. The policy issued by The Medical Protective Co., on the other hand, has a flat rate premium save for roentgenologists and radiologists, and all their premiums are less than those of the other two companies. In the main the policies of all three companies read much the same, but they do vary somewhat in special features which naturally appeal differently to different physicians who are largely influenced thereby in their selection of a policy.

Secondly, it is estimated that deducting out-of-State members, doctors not in active practice but not retired, and others in governmental and institutional work, there are about 4000 members of the Massachusetts Medical Society who should carry mal-practice insurance. Figures as of June 1, 1928, show that about 3000 are so insured, or about 75%.

Thirdly, policy holders are distributed as follows: in The U. S. Fidelity & Guaranty Co. 1434 with a promise of 179 more; in The Hartford Accident & Indemnity Co., which declines to give out its figures, not more than a few hundred; and in The Medical Protective Co. 1165.

Fourthly, Massachusetts ranks as about the worst State in the Union in number and size of suits against physicians. Of the many reasons put forward for this unsavory reputation it is felt only three are worthy of mention: unguarded remarks by doctors regarding the work and results of confrères; unscrupulous lawyers eager to gamble for damages; and perhaps a too ready trend on the part of doctors and insurers to settle out of court rather than face the notoriety of a trial.

Fifthly, the few instances in which it has occurred have proved the folly of the individual who carries malpractice insurance with more than one company. Instead of thereby doubling his protection, he quarters it; for in case of suit he has invited divided opinion, shirking of responsibility, and confusion of effort.

From these facts certain conclusions are warranted.

First, malpractice insurance affords physicians the best protection against suits unjust and otherwise. Every physician who so protects himself, by so much more protects his confrères, so that if 100% are insured, protection will, theoretically at least, be likewise 100%.

Secondly, it seems impossible to enroll a majority of the members of The Massachusetts Medical Society in any one company. For seven years The U. S. Fidelity & Guaranty Co. has made every effort so to do, backed by the recommendation of this Society. During that period its premium rates have been part of the time lower, most of the time the same, and for the past year higher, than those of its competitors. In spite of this Society's recommendation, in spite of advertising, in spite of urging and solicitation, this company has been able to enroll only about half of those insured. In the same seven years, without recommendation or solicitation, The Hartford Accident & Indemnity Co. has written a few hundred policies. The Medical Protective Co. in the last four years—the period it has been active in Massachusetts—has by earnest solicitation, without any recommendation, and in the face of more or less opposition, insured nearly 1200 members. It would seem a waste of time again to discuss the merits of the argument whether or not it is wise or essential to rally under one standard. In a previous report it was pointed out that for reasons then stated men were choosing to insure with companies other than the one recommended. Your Committee was then convinced that it was wiser to urge men to insure than to drive them into a recommended company, and was doubtful at that time whether in the face of opposition the effort to obtain enrollment under one standard was worthwhile. Your Committee is now convinced not only that the effort is not worthwhile but also that such enrollment cannot be obtained.

Your Committee is therefore of the opinion that no one company be recommended; that the field be left open to the three companies now doing business in Massachusetts; and that every member of the Massachusetts Medical Society be urged to take out malpractice insurance forthwith in one of the aforesaid companies, any one of which is financially sound and can be trusted to give adequate protection and efficient service.

With this final report your Committee respectfully asks that it be discharged.

Allen G. Rice, *Chairman*,
Charles A. Sparrow.

NO. 8

Minority Report of the Committee on Insurance

I feel that the Council owes Doctor Rice a vote of thanks for the conscientious work that he has done in investigating the insurance situation in Massachusetts. I feel, however, that Doctor Rice does not appreciate the gravity of the situation with which we are confronted. When one pauses to think that in the last six years there were 348 claims entered, an average of more than one out of every four physicians insured with the U. S. Fidelity & Guaranty Co., we must admit that we are facing a grave situation. It is logical to presume that the ratio has been as high in the other two companies in the field. It is this alarming increase in malpractice suits which has caused the other companies to withdraw from the field. Two of the big old line companies who formerly did business in Massachusetts still continue to do business in many other states, at a lower rate than is now charged in Massachusetts.

If we are to accept Doctor Rice's report we are to admit that we are licked. I feel, on the other hand, that we have not commenced fighting. Most of the members of the Massachusetts Medical Society have not waked up to the problems that are confronting us. Let me quote a paragraph from a member, that I am afraid represents the attitude of too many members. He says—"It seems to me that the insurance companies are more worried over the malprac-

tice suits, and other conditions concerning the Medical Profession than the physicians themselves". Gentlemen: I think the time has come to call a spade a spade and fight with our gloves off. It is only by the complete coöperation of all members of the Society that we can gain our goal. Doctor Rice says that the U. S. Fidelity & Guaranty Co. and the Medical Protective Co. of Chicago are on a par. With this I cannot at all agree.

The United States Fidelity & Guaranty Co. has a complete claim department in Boston. They employ one man who is a specialist in this work, who devotes his entire time to the immediate investigation of these claims. They also employ another man whose duty it is to prepare these cases for trial. Henry V. Cunningham, their attorney, is without exception the ablest trial lawyer on malpractice suits in the state, and to date they have not lost a medical malpractice suit. This company has capital and surplus of over $18,000,000 and is in a better position to handle these claims than any other company that ever did business in Massachusetts. Since 1921, when their policy was approved by the Council, they have insured only members of the Massachusetts Medical Society, a fact that has considerably increased the membership of the Society. Even if the company is convinced that the case will never go to trial, or is outlawed under the two-year Statute of Limitations a complete investigation is made. Malpractice insurance is the most uncertain insurance written. No company can tell for years afterwards what the claims are going to cost or whether there will be any new claims entered which may be turned into fraud and tried years afterwards. The reason that this company has lost no cases is on account of the wonderful investigation, preparation and trial. One case they tried in Fitchburg lasted 27 court days, probably the longest trial ever held against a physician. This was won to the satisfaction of everyone.

Compare this record of the U. S. Fidelity & Guaranty Co. with that of the Medical Protective Co. of Chicago. They have no claim department in Massachusetts, employ no regular investigators, and their agents have nothing to do with claims. In case a physician is sued I understand they send him a questionnaire a yard long with a request to fill it out and return it to Chicago. Then they notify him to get in touch with a certain law firm in case of any additional letters. Before the trial the lawyers make what investigation they can. By this time some of the nurses or other witnesses may be dead or out of the state. In the last few months they have lost four suits ranging from $700 to $14,000; two of these were medical and two dental. They have just come out with an additional clause, making it a part of their policy, both for defense and indemnity, to protect a doctor against undue familiarity with a patient, slander, assault, etc., which in my opinion is contrary to law and public policy, and yet certain physicians in this state say that the Medical Protective Co. is on a par with the U. S. Fidelity & Guaranty Co. This I cannot agree with. I am not here to criticize the Medical Protective Co., but by this brief comparison I want to show you that the Council showed good judgment when they approved of the U. S. Fidelity & Guaranty Co. November 9, 1921, to represent the members of the Massachusetts Medical Society.

For the first time in the history of malpractice insurance a company has undertaken to write the business on a business basis, and the U. S. Fidelity & Guaranty Co. is now charging each doctor according to his hazard, exactly the same as automobile, fire insurance and other lines. According to the Insurance Commissioner's report of January 1, 1928, the Medical Protective Co. had reserves for unpaid losses of $1,202,276, capital and surplus of $939,109 and gross income of $1,200,019. Taking into consideration the seriousness of the malpractice situation and the uncertainty of the claims, there is no question in my mind but what the U. S. Fidelity & Guaranty Co., which is one of the oldest and largest companies in the field, is a safer proposition for the members of the Society to insure in than a company which does only one line of business. The U. S. Fidelity & Guaranty Co. for work done during the first six years have had 348 claims entered and undoubtedly there will be a good many more for work done during that period, that have not been heard from yet. The company, in those six years, lost over $60,000 above gross premiums in that time and, in my opinion, if it had not been for its agents putting the business on a business basis last November this company would have dropped out of Massachusetts the same as the others have done. There is only one other old line company writing this business in Massachusetts and they frankly confess they do not want it and they are advising their agents not to solicit it.

Although in 1921 the Council voted to recommend the U. S. Fidelity and Guaranty Co. no united effort has ever been made by the Society to get the members to coöperate. It seems to me that this is tremendously important. No scheme of this sort can be brought to a successful issue without a definite campaign of publicity. It has been proved conclusively, to my mind, that such campaign must be waged by the Society itself and not left to the insurance agents. Any communication from the insurance agents is looked upon as a matter of business. This is a serious business and the business of the Massachusetts Medical Society. When this policy was originally approved the agents guaranteed the company at least 2000 members and on November 10, 1927, there were only a little over 1300 members insured. Since the policy was put on a business basis the membership has increased so that at the present time there are about 1675 members of the Society insured with this company. This is over 20% increase in a little over six months, showing that the doctors are appreciating the service rendered by this company and that the policy is now on a solid foundation.

We have two brilliant examples of what can be accomplished by a campaign of publicity in exactly this situation. I refer to the Maine Medical Association and the Massachusetts Dental Society. About four years ago the State of Maine went through a similar stage to what we are going through now. Many of the companies withdrew from the state and the others raised their rates to $40 and $45. The society arranged with one of the old line companies to write a similar policy to that of the U. S. Fidelity & Guaranty Co., approved by the society with a rate of $16.75 for a $5000 policy. Through the activities of the state society and their malpractice committee they have practically eliminated law suits in the state. There are about 800 members in Maine and approximately 600 of these carry insurance, as approved by their society. A quotation from Doctor Bertram Bryant of Bangor, Maine, Secretary of the Maine Medical Association and Chairman of the Insurance Committee, reads—

> "We have never sent out letters to the members of the association, but always in my annual report I have taken the matter up, and have also taken it up with the councilors of the various districts and have mailed them lists of members not insured in their society, and have advised them to do personal work in getting in as many under the insurance plan as possible.
>
> "Up until a year ago we carried a medical defense—that is, we paid the fees of our attorney for defending those cases not in-

sured. This year we felt that it was not fair to those who carried insurance to help pay the bills of those who were negligent, so we advised everyone to get insurance and ceased giving counsel aid.

"Every year something is done either through the County Secretaries or through my own office, urging the men to take on protection."

In our own state we have a fitting example of what can be done by coöperation. The Massachusetts Dental Society, in 1915, approved of the U. S. Fidelity & Guaranty Co. as their official company. They have sent out many letters on the stationery of the society and in their annual report each year they have urged all members to insure in this one company. Nearly all dental claims are investigated by their Secretary or the Chairman of the Insurance Committee. Through their efforts they have so reduced the claims that the company, last fall, increased their policy 50% without additional charge. There are about 1488 members of the Dental Society and about 950 of them carry insurance with that company. There are a great many dentists who carry no insurance at all. Quoting from the *Bulletin* of their society of June, 1926—

"Shortly after we had made our decision to continue having the U. S. Fidelity & Guaranty Co. issue our insurance, the Medical Protective Co. reduced their rates to a lower figure than what was being charged by the U. S. Fidelity & Guaranty Co. Your committee feels that it was necessary for them to do this to be able to obtain any business at all and offset the prestige given the U. S. Fidelity & Guaranty Co. by the action of the Committee and Officers of the Massachusetts Dental Society in naming the U. S. Fidelity & Guaranty Co. as our company. We further feel that should the U. S. Fidelity & Guaranty Co. through lack of the support of our members in placing their insurance as recommended by the committee or lack of cooperation furnished by the society in bettering conditions withdraw from writing this form of insurance as have the other large companies, leaving but one company in the field, the rate would immediately be raised to a prohibitive figure. We are borne out in the previous statement by the actual experience of every insurance company that has written Malpractice Liability Insurance in Massachusetts where they have not had the coöperation of organized dentistry and medicine. This experience cannot be changed".

Let me quote, too, from one of the typical letters sent out over the signature of the President, Secretary and Chairman of the Insurance Committee of the Massachusetts Dental Society.

"This letter is sent to you at this time requesting your full coöperation as a member of the Massachusetts Dental Society in helping to overcome one of the most dreaded evils that the Dental Profession has to contend with — *Alleged Malpractice and Blackmail Claims.*

"These claims are coming at an increasing frequency and conditions in Massachusetts are now worse than anywhere else in the United States. Careful study has shown your committee that our *entire membership must coöperate* with our Officers if this condition is to be remedied.

"This advice shows that we must combine and coöperate 100% strong and stand back of our Insurance Company, the United States Fidelity & Guaranty Co.

"Considering as we have, financial strength, completeness of Claim Department organization, our own experience of service rendered during ten years, the experience of all high grade companies with this insurance and particularly the necessity of stopping these claims by full coöperation, it is not advisable to make any change even for a *temporary* saving of a few dollars.

"We ask your help. Please fill out the enclosed card and return at once. If our records are to be full and complete, we want to know who is coöperating with us in this very important matter".

Dr. Gardner of Lowell hits the nail on the head when he says—"I believe, aside from what this company is doing, that coöperation among physicians would accomplish the most. In order to get more and better coöperation we need some missionary work in the society itself". I cannot emphasize too strongly that there must be more coöperation between the members of the medical society and the insurance company. If this is done there is no question but what rates can be reduced.

My recommendation is that our Malpractice Committee conduct a publicity campaign and endeavor to enroll as many members as possible in the company which we have chosen to represent us, the U. S. Fidelity & Guaranty Co. Gentlemen: the situation is serious. If we accept Dr. Rice's report and cease to recommend the U. S. Fidelity & Guaranty Co. after six years of trial, I think they will cancel their policies and withdraw from the state.

ARTHUR H. CROSBIE.

NO. 9

REPORT OF THE COMMITTEE ON CLINICS AND HEALTH ASSOCIATIONS

At a meeting of the Council of the Massachusetts Medical Society, October 5, 1927, it was voted that a Committee on Clinics and Health Associations is hereby created, consisting of one member, elected by each District Medical Society, whose duties shall be: to investigate Clinics and Health Associations.

Sixteen out of the eighteen district societies appointed members to the committee, Barnstable and Bristol North not electing members to the committee. A committee of five was elected to make a report. This committee voted that a questionnaire be sent to each district member; and that any member of the society could also fill out the questionnaire. Only one district member failed to return his questionnaire.

We will not attempt to offer what individual reports contained, as the reports of the members as a whole were rather distinctive, in that there was the same common complaint of abuses in certain communities, or there were no abuses to be noted, in other communities. Throughout the State the report of the members showed that the cities of less than 50,000 are practically free from the prevalent abuses—these will be later enumerated—that were found to be rather the rule in the cities of over 50,000.

We are unable to make any attempt at showing the numbers or percentage of patients treated at clinics who could afford to pay a private physician; but it can be plainly seen in our investigation that the only thing that limits the number of patients who are able to pay for treatment, at free clinics, is that no more patients are willing to place themselves in the questionable position of accepting charity. There is an attempt to overcome this prejudice

by the numerous agents amongst the welfare workers who seem interested to teach the public that only in group medicine can they have their ailments properly diagnosed. They would have the people believe that group medicine is only practised in clinics. The reason for this is that all the clinics, with very few exceptions, are wide open for anyone who wishes to apply. This custom, as we have stated before, prevails only in the larger cities.

The abuses noted as most prevalent are:

Free clinics generally are not only treating any patient who will apply, but they are soliciting these patients through other health agencies. Nurses, with rarely an exception, are sending all their patients to free clinics. Hospitals are soliciting free bed donations, with a promise that the donor may send in patients for free treatment, regardless of the financial status of the patient. Consultation clinics are found to be perhaps the worst offenders against the ethics of medicine. When consultation clinics first started, the patients were required to have a letter from a doctor. Now practically every clinic has its consultation clinic or pay clinic connected with the free clinic, where the wheat is separated from the chaff and turned over to the pay clinic. Clinics for health examinations for children are being used, with the aid of soliciting nurses, to turn the patient against the practising physician, by telling the parents of the children that only a specialist knows anything about children. Clinics at one time used to require a letter from a doctor; but now these clinics do not need the doctor, as they have the health organizations whose nurses are in close touch with the patients and are out working for them at all times. One clinic in Boston has a night clinic where the doctors are paid so much per night. The patients are solicited for the doctor; (the doctor gets his and the solicitor gets his). This is simple out and out fee splitting and soliciting. Another clinic in Boston charges people for minor operations a fee of from $10 to $35 and puts the money with the general fund. The doctor at this clinic gets nothing.

Perhaps the greatest growing evil in fostering clinic abuses is the nurse, whether she represents the Red Cross, the Public School, or the Public Welfare. If a doctor works in a clinic he is all right; if he doesn't, then he is just out of luck. A doctor who has charge of health examination in a local Board of Health reports that he has still to find a patient who was referred to his own doctor by a visiting nurse.

Most of our hospitals with a public ward are governed by the following rule: "No patient in the ward shall be charged for medical treatment." As interpreted by the industrialist, this means that any patient may gain admission to the ward through a free bed, no matter what his ability to pay a private physician may be; and once he has reached the bed, nobody shall question his right to free treatment. These individuals that donate hospitals and free beds feel that the medical profession should willingly provide free medical treatment, in the interest of humanity alone. But the practical difficulties of such one-sided idealism in a ruthlessly commercialized age can be realized only by the medical profession! The physician must live; and how, in justice to himself and his family, can he be expected to serve as the sole exponent of an idealism where virtue is its only reward?

We have placed officially before you what every member knew existed; but a certain number of our members thought that any attempt to control these abuses, which have grown to great proportions under the cloak of charity, would be useless. Certain other groups are not in favor of taking any action against these abuses, because they have lived their medical life in their environment, and perhaps have prospered. Members of hospital staffs have aided or abetted the present procedure of keeping the wards filled and the clinics up to the standards, especially in numbers of patients treated.

The parent society has not attempted to regulate the activities of health associations. The parent society evidently does not believe that the activities of these allied associations should be regulated; it has taken no action, well knowing that in the practice of medicine we must follow and reflect our very commercial civilization. The industrialist is commercializing medicine; he has a system of his own. He attempts to lower the costs of living for his employee. If he has a large establishment, he has an emergency room with a nurse. In the different departments he has a sub-nurse who gives first aid to the mechanic at the machine. This sub-nurse is not a trained nurse, but usually a worker at the bench who has passed the examination in a first aid school. If the job is too big for the sub-nurse, the patient is sent to the emergency room; and if the nurse in the emergency room cannot handle it, a doctor is called who is in the employ of the factory. If the doctor cannot take care of it, the patient is sent to the hospital; and the rest of the treatment is free. We presume that in the future a nurse will get three or four years in some emergency hospital; and when she is in the factory, it will not need a doctor. This system applies to other ailments of employees, as well as to industrial cases. We are of the opinion that these nurses are really practising medicine, and not within the law. These nurses are not supposed to call the doctor if they decide that they can treat the condition. The State regulations of clinics state that a doctor must see every case; this is interpreted to mean that a doctor sees the case once, and that a nurse may treat the case for an indefinite time without calling the doctor again. This interpretation may reflect something in the future, when we know that visiting nurse associations are now opening registered clinics.

All these practices constitute an attempt to regulate the charge that shall be made for medical treatment. Some free clinics have raised the price of admission to the limit that the trade will stand. One hospital has raised the price of admission to $1.00. This is supposed to be a charity clinic, but it looks like a business proposition pure and simple of the business manager of the hospital.

We should have some rights in matters pertaining to clinics where members of our society are employed with or without compensation. We should make regulations for the conduct of our members at these clinics.

In the Plymouth District conditions were such that it became necessary to pass the following resolutions:

"Resolved: That the Plymouth County Medical Society accepts the principle that its members—are ready—and willing to serve freely—and without compensation in—all free clinics which restrict their services to patients worthy of free medical attendance.

"*That* members of this society refuse to treat patients at free clinics or at Graduated Fee Clinics who have not been referred to such clinics by their family physician. Applicants who have no family physician will be investigated by the Committee at clinics.

"*That* members of this society shall not recommend for examination or treatment at such clinics patients able to pay a private physician.

"*That* a Standing Committee of Five (5) be appointed, whose duty shall be to investigate all Free and Graduated Fee Clinics, pass on the eligibility of patients applying at clinics, and to investigate and

report on any case requested by the society or any of its members."

In this district nurses were given cards by the hospital which were distributed by the nurses to anyone who needed treatment. The nurses signed the cards; and a considerable number of patients who were being treated by physicians were solicited, with the result that the doctors lost these patients. These resolutions are, we understand, considered rather drastic or even radical by some of the medical profession. Some think that a large percentage of patients applying to clinics have no physician. A check-up on this statement at the Brockton Hospital shows that only 6% of the patients treated at the clinic have no physician. Perhaps this showing could be further reduced by investigating the 6%. Most of us will agree that there is a need for supervision and regulation of clinics and health associations. We are of the opinion that investigations and regulations of clinics might be a right of district societies, rather than of the parent society. Local conditions and needs of clinics are perhaps best judged by those who reside in the district. Some clinics are run solely for commercial reasons, to induce or solicit patients to apply for free treatment, many of the latter being turned over to the doctor as private patients.

When a clinic is operated by an individual, and these methods are used, the intent is rather obvious. "Teaching clinics and floating populations in large cities might require regulations quite different from those employed by smaller communities". We think that it is possible for resolutions to be adopted by district societies that will not conflict with the By-Laws of the State Society. While the district society could investigate and make regulations for local clinics, the Committee on Ethics and Discipline of the State Society could act in an advisory capacity. Disregarding local customs and regulations of district societies should constitute a breach of ethics of the State Society.

We are submitting to you for consideration the following resolutions:

Resolved: That members of the Society should be guided in their actions by the rules and regulations of their District Society. Disregarding regulations of a District Society by its members shall constitute a breach of ethics in the State Society.

Resolved: That the Committee on Clinics and Health Associations investigate pay clinics and free bed service at hospitals. They shall call to the attention of hospitals that patients with means to pay should not be allowed the privilege of free bed service. That the soliciting of patients for free beds and clinics is unethical. That pay clinics where doctors are paid by the day or night or where there is a division of the fee per patient is a form of soliciting with fee-splitting which is not tolerated in the practice of medicine by members of the Massachusetts Medical Society. They shall investigate hospitals and pay clinics where charges against them are submitted in writing by the secretary of a District Medical Society. This resolution shall not apply to pay clinics that are owned and under the management of members of this society or pay clinics that require a letter of introduction from a physician.

WM. G. CURTIS, *Chairman.*

NO. 10

REPORT OF THE COMMITTEE ON A BRANCH OF THE WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION IN MASSACHUSETTS

The Committee appointed to consider the desirability of establishing in Massachusetts, a State Woman's Auxiliary to the American Medical Association beg leave to submit the following report:

> The Committee recommends that the Massachusetts Medical Society give its approval to the formation of a State Woman's Auxiliary to the Woman's Auxiliary of the American Medical Association.

Respectfully submitted,

CHAS. E. MONGAN, *Chairman.*

NO. 11

REPORT OF THE COMMITTEE ON A PERMANENT HOME FOR THE SOCIETY

The plan to secure adequate headquarters for the Massachusetts Medical Society was adopted in order that the Society through its officers and committees might more adequately serve the more than 4400 Fellows and better fulfill its obligations to the community. When the present Boston Medical Library was built it was hoped that headquarters for the Society might be provided. Of recent years the crowding of the Library made this impossible. The Committee appointed by the Council at its last meeting considered the purchase of a house in Boston advisable and undertook to raise the needed funds. The plan was received with great enthusiasm in some districts, particularly in the western part of the State. Extremely generous subscriptions have come from that and some other districts. In some cities and towns every Fellow has contributed. The first gift was one in memory of the late Dr. Frank Paddock of Pittsfield, a former President of the Society. The friends and associates of the late Dr. Ayres P. Merrill of Pittsfield, former Vice-President and a tireless worker for the Society, have made their contributions as a very touching tribute to his memory.

In the midst of the attempt to secure the necessary funds the Boston Medical Library came forward with a plan to unite the medical interests of the State. This greater and better plan which had seemed beyond reach is now possible.

The efforts of the Society may well be strengthened to establish not only a home for the Society but to help in making the Boston Medical Library in a new home under the same roof, an aid to every physician in the State. Allied medical interests may well be included in the new building. It is only through such union of all concerned for the betterment of medicine in its broadest sense that any appeal can be made to the public for aid in a matter concerning the future welfare of the Commonwealth.

Your Committee, therefore, recommends that it be continued and be instructed to raise such further funds as may be needed to secure adequate headquarters for the Society in association with a new building for the Boston Medical Library. In making this recommendation it is understood that the Library is now definitely pledged to undertake to raise adequate funds for a building large enough to meet its growth for many years. It is further understood that the Library is pledged to plan its home so that there may be a union of the medical and allied interests of the State under one roof. And it is further understood that money raised for the home for the Society will not be spent in any way which may conflict with plans for such a union of medical interests. Money contributed now to the Society will be devoted to the development of a much finer plan than had seemed possible to the Committee when it first met. Until this plan can be realized adequate temporary quarters may be secured.

Good faith with those Fellows who have subscribed so generously requires now that all others who are able to give and who have hesitated because of doubts

as to any possible estrangement between the Library and the Society, should now do their share.

It is therefore moved:

1st—That the Committee on Headquarters be continued.

2nd—That the votes passed at the last meeting of the Council defining the powers of the Committee be rescinded.

3rd—That the Committee be instructed to continue its efforts to secure funds for Headquarters for the Society.

4th—That the Committee be given full power to coöperate with other organizations.

5th—That the Committee be given power to secure temporary headquarters for the Society.

6th—That in any temporary or permanent headquarters proper recognition be given to any memorial gifts.

THOMAS J. O'BRIEN.

A CASE OF DIVERTICULITIS OF THE FOURTH PART OF THE DUODENUM*

BY F. B. LUND, M.D., F.A.C.S.†

A SURGEON whose work leads him into the field of gastric surgery not infrequentiv has to deal with the common variety of duodenal diverticulum, which is the so-called "acquired" form, and is associated with the scarring of the first portion of the duodenum by the cicatrices of ulcers. These acquired diverticula involve the first portion of the duodenum, are associated with ulcer, and all the coats of the bowel are implicated. A symptomatic cure, at least, is usually effected by treatment of the ulcer. For this purpose a gastroenterostomy is in most cases sufficient, but if the pocket is well-marked or extensive, it may be inverted by a purse-string suture in addition to the gastroenterostomy for the underlying ulcer.

The more interesting form of duodenal diverticulitis is, however, the congenital form; this is commonest in the second portion of the duodenum, but occurs less frequently in the third and even the fourth portion, and may, as in the case reported, be associated with congenital diverticulitis of the jejunum. The duodenum, during the development of the embryo, is the seat of extensive and complicated processes, characterized by great activity. From the second portion bud off the processes which develop into the liver and pancreas; the peritoneum folds over the duodenum and pins it down, the mesenteric vessels cross it, and its own complicated blood supply develops. There is said to be one period in the development when there is a solid blocking by tissue at the middle of the second portion of the duodenum, through which two blind ends have to come together from above and below. If they fail, the congenital stenosis of the duodenum, which is occasionally seen in babies' clinics, results. It is not strange that under these circumstances diverticula develop, and that they are often, as in the case reported in this paper, associated with accessory pancreas. In this case there was one accessory pancreas close to the base of the diverticulum and another several inches down the jejunum.

The commonest congenital diverticulum is a small affair, found usually at autopsy (because it does not cause symptoms) and appearing as a pocket into which the duct of Wirsung and common bile duct empty.

The diverticula which cause symptoms are those on the anterior upper and lower margin which fill with food and, if their base is small, may become infected and inflamed. They may, however, cause too few symptoms to require surgery, and it may be said that the majority of them have been discovered during routine X-ray examinations.

The case here reported is interesting because the main diverticulum which caused the symptoms.

1. Arose from the fourth portion of the duodenum and had an accessory pancreas in its base.
2. Extended behind the duodenum upward and to the right beneath the liver, where it lay behind the peritoneum.
3. Developed to the size of a Bartlett pear, with a long stem.
4. Showed a definite fluid level when filled with bismuth and could be seen to fill and empty.
5. On account of the length and narrowness of its base, it filled and emptied slowly, became inflamed, and was the cause of symptoms simulating gall bladder disease.
6. Was associated with numerous symptomless diverticula of the jejunum, which show plainly in the X-ray plates, but which caused no symptoms because their filling and emptying was unobstructed on account of the broadness of their bases. (They all lay along the mesenteric border of the jejunum and were about 3/4 inch to an inch in diameter, looking like little balloons.)
7. By its removal the symptoms were relieved.

Inasmuch as one congenital deformity is apt to be associated with another, it may be interesting to note that the woman had a cleft palate.

A recent review of the literature shows that the first case of diverticulum of the duodenum was reported by Chomel in 1710. Hartung reported a case in 1761 and Morgagni in 1839. Up to 1910 less than 100 cases had been reported. One of the most interesting articles on the subject was published in 1925 by Butler and Ritvo, roentgenologists, of the staff of the Boston City Hospital. Another very interesting article has been written by the roentgenologists, Case and Cole.

CASE REPORTS

The case in question was seen in consultation with Drs. Prouty, Weston and Holmes at the Elliot Community Hospital in Keene, New Hampshire, on May 3, 1927.

The patient, S. S., age 63, housewife, entered the hospital May 2, 1927.

Chief Complaint: Chronic Indigestion.

Family History: Father and mother dead. Mother had "stomach trouble" for years.

Present Illness: The patient has had more or less indigestion for years. During the past year this has become markedly worse, so that for the past few weeks she has existed mostly on weak tea and crackers. She has lost considerable weight during the

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†For record and address of author see "This Week's Issue," page 1013.

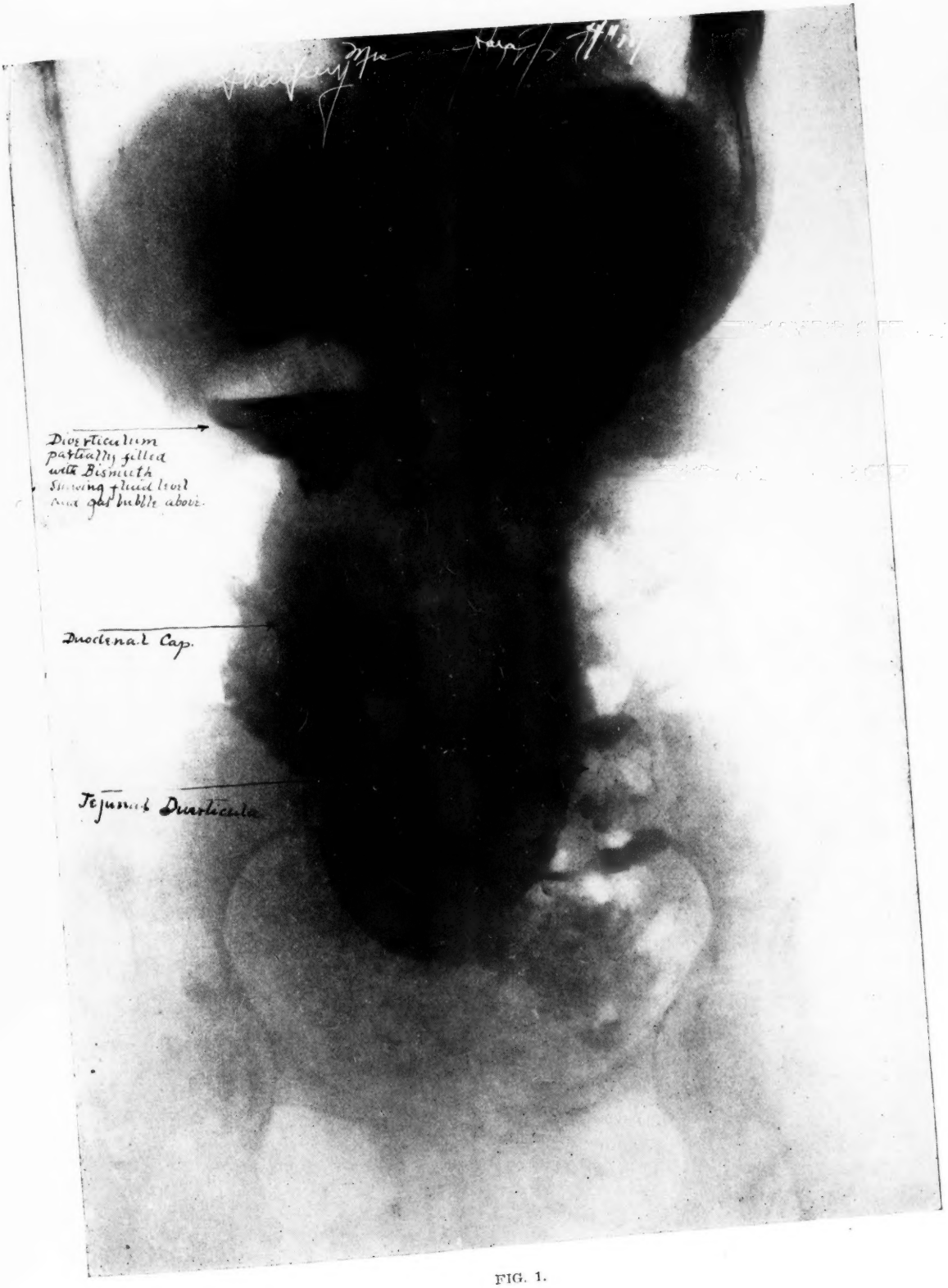
Diverticulum
partially filled
with Bismuth
Showing fluid level
and gas bubble above.
Duodenal Cap.
Jejunal Diverticula

FIG. 1.

FIG. 2.

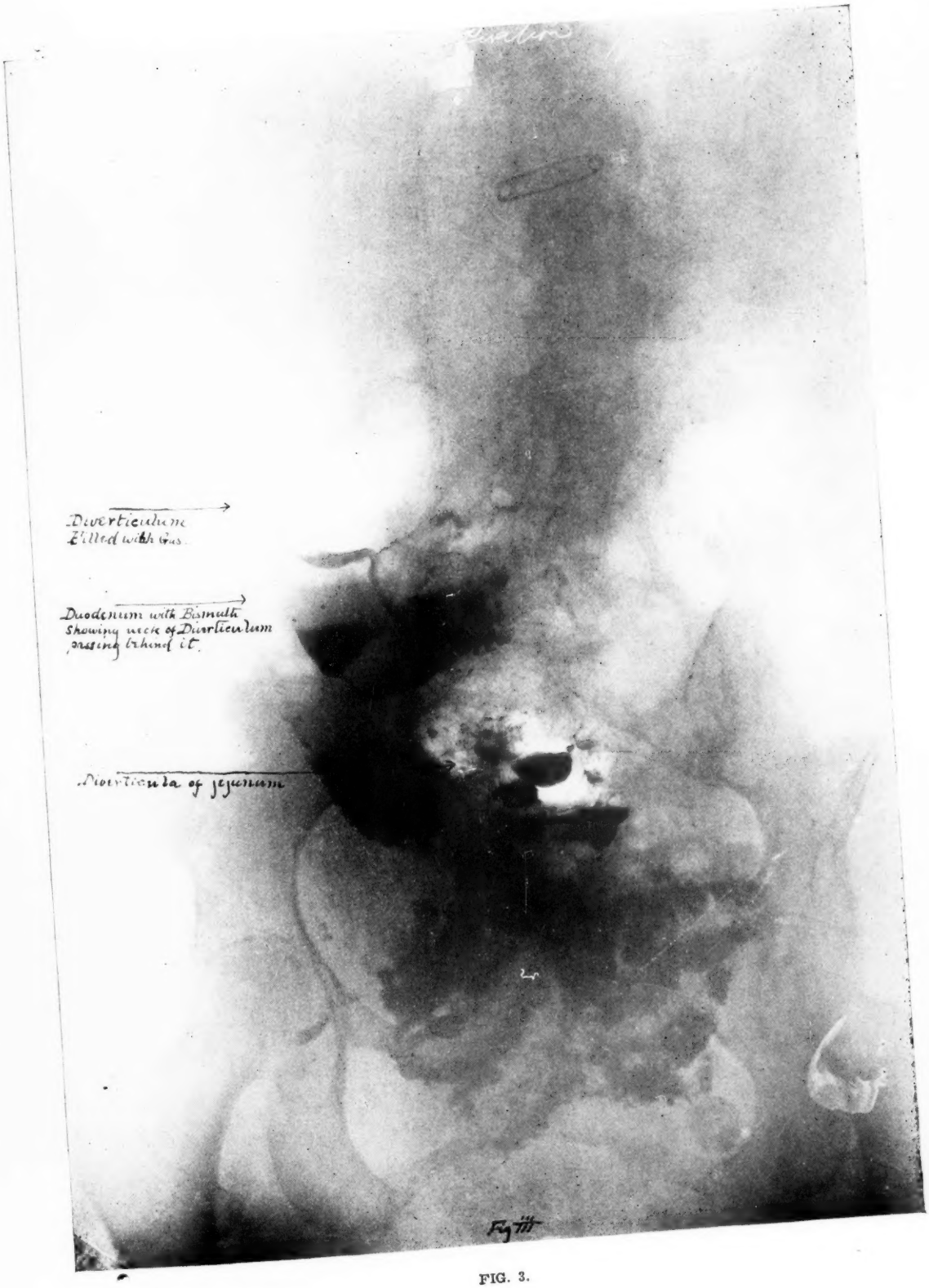
Diverticulum
Filled with Gas
Duodenum with Bismuth
showing neck of Diverticulum
passing behind it.
Diverticula of jejunum
Fig III

FIG. 3.

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past year and a half. The patient is greatly annoyed not so much by acute attacks of pain, but by more or less chronic indigestion, with a feeling of distention, particularly in the upper part of abdomen in the region of the gall bladder, with more or less vomiting; at no time has she had any severe sharp pain. She is greatly troubled by rumbling gas throughout the bowels almost continuously.

Physical Examination: Examination shows a very thin woman. Has a cleft palate. Heart sounds clear; no abnormal respiratory sounds heard. Abdomen: No tumors felt, possibly owing to a marked kyphos of the spine, which is curved to the left and then forward, bringing it up close to the anterior wall of the abdomen; at first, on palpation, it resembles a tumor. (See X-rays.)

Provisional Diagnosis: The diagnosis of cholecystitis was made before the X-rays were taken, but the X-rays showed plainly multiple diverticula, so that the provisional diagnosis was diverticulitis of the third portion of the duodenum. The X-ray work was done by Dr. C. H. Jennings of Fitchburg, and his excellent plates are here reproduced.

Final Diagnosis: Diverticulitis of duodenum and jejunum.

X-ray Report: "Long, low stomach without filling defects, 5" below pelvic brim, erect; very large, well formed duodenal bulb; a 2" gas bubble above the duodenal bulb, gradually filled with barium; long, narrow channel, possibly from vicinity of duodenojejunal junction seen later, consistent with large diverticulum; segmented, non-adherent appendix; marked saddle colon with marked stasis. (Marked curvature of spine.)"

Operation: Excision of diverticulum. Upper right rectus incision. Marked arteriosclerosis of aorta and the common iliac. Stomach extended down into pelvis. First and second portions of duodenum apparently normal. Pylorus normal. Diverticulum of the fourth portion of duodenum extended retro-peritoneally back of the first portion of the duodenum and projected up beneath the gall bladder. Gall-bladder normal. The peritoneum over the diverticulum was divided, the cyst enucleated, and the finger forced it down back of the duodenum out through the posterior peritoneum, just to the left of the superior mesenteric artery. There was an accessory pancreas attached to the duodenum just beyond the diverticulum and another attached to the jejunum further down. In separating the neck of the diverticulum there was a slight leak of gas at the point where the accessory pancreas was attached. A clamp was placed on the pedicle of the diverticulum and another behind it. It was cut off and the stump was transfixed by a suture and then tied off. The stump of the diverticulum was inverted together with the accessory pancreas by a single row of No. 2 chromic Lembert sutures; peritoneum closed over it with a similar row of sutures. On pulling out the jejunum there was found to be a long chain of diverticula extending down along the small intestine. The upper one was inverted and the intestine closed over it. The abdomen was closed in layers with chromic gut sutures, reinforced by through and through silkworm gut. The operation took thirty-five minutes.

Post-operative Notes: After the operation the patient had no pain requiring morphia, vomited but once or twice and left the hospital in twenty days. I have heard from her recently that she is in good health.

DISCUSSION

The following discussion was taken from an article written by Cole and Roberts in 1920:

"The conflicting opinions on the causation of these diverticula may be summarized as follows:

"1. They are congenital in their nature representing abortive attempts at the formation of a supernumerary pancreas. This view is supported by the studies of Lewis and Thing, Letulle, Falconer, and Tandler.

"2. They are congenital only in the sense that these pancreatic anlages cause local defects in the musculature and the possibility of pouching results from age, intestinal atony or an increase of intraduodenal pressure. This view is held by Linsmayer from his exhaustive study of autopsy material (loc. cit.)

"3. An essential weakness at the fold of Vater according to Fleischman is a potential cause of herniation at this point.

"4. Traction from without from gall-bladder disease and atrophic pancreatitis has resulted in diverticula according to the observations of Keith and Roth.

"5. Pressure from partial obstruction below the diverticula was responsible for cases recorded by Keith and Jachs. Keith has particularly emphasized the importance of enteroptosis and partial obstruction at the duodenojejunal junction as the cause of back pressure.

"6. Attention has been called by Perry and Shaw, Moynihan, Linsmayer and Wilkie to the association of diverticula with duodenal ulcer. These diverticula are true herniations of the inner coats and are not to be confused with the pouchings of the uninvolved portions of the cap which are pouchings of all the wall."

In regard to the diverticula in the case reported, there can be no doubt of their congenital origin.

"*Differential Diagnosis:* Diverticula must be differentiated skiagraphically from their pathologic conditions which fall into two groups.

"Group 1 includes those in which the roentgen findings occur before the ingestion of the opaque meal, and are caused by conditions such as renal calculi, gall-stones, calcified mesenteric or retroperitoneal glands, calcified Gleason's capsule, faecaliths, and pancreatic calculi. A diverticulum may hold sufficient food to make its visualization possible, especially if the patient has previously ingested salts of bismuth, barium, iodine, or bromin.

"Group 2 includes those pathologic processes in the gastrointestinal tract which may be visualized by an opaque meal.

"a. Part of the cap may be deformed by induration or cicatricial contraction from an ulcer. That part of the cap which is uninvolved with such indurations and cicatricial contraction may be dilated and compensate for the contracted area, and such dilations closely resemble certain types of diverticula.

"b. A small diverticulum of the cap may with difficulty be differentiated from a penetrating ulcer. The diverticulum presents more of a puckered appearance with a small ostium and changes more than does the penetrating ulcer on a series of plates.

"c. Perforation of a small duodenal ulcer with formation of a small accessory pocket has been observed, and the differentiation from a true diverticulum can hardly be made except from the history of the case and shrinking of the pocket in the course of several months.

"d. Perforation of the duodenal ulcer into the gall-bladder or the passage of a stone through the gall-bladder and duodenal wall has given rise in several instances to the filling of the gall-bladder with the opaque meal.

"e. Isolated collection of barium may be found in the haustra of the colon several days or a very short time after the meal has been taken.

"f. Isolated collections of opaque meal may be retained in the crater of an ulcer on the posterior wall of the stomach or more rarely near the greater curvature. The differentiation has to be made by careful study of the series at various times after the ingestion of a meal in various postures."

This case calls attention to the statement in Opinion No. 1 that diverticula are congenital in their nature and represent abortive attempts at the formation of a supernumerary pancreas. It is interesting to note that double supernumerary pancreas accompanied the case reported.

BIBLIOGRAPHY

Butler and Ritvo: Boston Med. and Surg. Jour., 1925, cxcii, 705.
Roberts: Surg., Gyn. and Obst., 1918, xxvii, 369.
Chomel: Hist. de l'Acad. roy., Par., 1710.
Morgagni: Trad. ital., Firenzi, 1839.
Buschi: Arch. f. path. Anat., etc., Berl., 1911, ccvi, 121.
Linsmayer: Verhandl. d. deutsch. path. Gesell., 1914, p. 445.
Lewis and Thing: Am. J. Anat., 1908, viii, 505.
Letulle: Bull. et mém. Soc. anat., Paris, 1898.
Falconer: Lancet, 1907, i, 1296.
Tandler: J. Morphol., 1902, xxiv, 187.
Fleischman: Leichenoeffnungen. Erlanger, 1815.
Keith: Lancet, 1903, i, 639; Brit. M. J., 1910.
Roth: Arch. f. path. Anat., etc., Berl., 1872, lvi, 197.
Jachs: Inaugural Dissertation, Kiel, 1899.
Perry and Shaw: Guy's Hosp. Reports, 1893.
Moynihan: Duodenal Ulcer, p. 216.
Wilkie: Edinburgh M. J., 1913, xi, 219.
Bauer: Wien. klin. Wchnschr., 1912, xxiii, 879.
Forssell and Keyes: Nord. med. Arch., vol. xliii.
Basch: Am. J. M. Sc., 1917, cliii, 833.
Case: Am. J. Roentgenol., iii, s. 6.
Cole: Arch. Roentgen Ray, 1912, April.
Cole and Roberts: Surg., Gyn. and Obst., 1920, xxxi, 376.

NEW CLINICAL AND EXPERIMENTAL STUDIES OF THE INTERRELATIONS OF THE THYROID ADRENALS AND THE NERVOUS SYSTEM*

BY G. W. CRILE, M.D., F.A.C.S.†

EIGHTEEN years ago, in an Ether Day Address at the Massachusetts General Hospital, I presented what was an attempt to apply certain principles of evolution to the interpretation of known biological and clinical phenomena. Since that time, my associates and I have continued along the same line of reasoning and have turned to physics for an added means of interpretation. It is in particular a clinico-physical exposition of the interrelations of the thyroid, the adrenals, and the nervous system that I shall now present. Since there are several distinct phases that must be covered in order that we may arrive at our conclusions, I am indeed grateful for the generous allowance of time at my disposal and shall hope not to make an inconsiderate use of the privilege.

So-called Postoperative Hyperthyroidism: The violent reaction which is called postoperative hyperthyroidism is identical with the phenomena seen in the crises of the disease itself and in the final phases of cases in which operation is not performed. In a case of well-developed hyperthyroidism a violent exacerbation of the disease may be precipitated by (a) emotional excitation—fear, anger, worry, etc., (b) physical injury—crushing tissue, surgical operations without local anesthesia, etc., (c) foreign proteins—as in acute infection, influenza, tonsillitis, absorption of wound secretion, etc., (d) asphyxia—as in obstruction of the trachea and in bilateral paralysis of the vocal cords, in cases of pressure from a goiter, etc., (e) hemorrhage, (f) physical exertion, (g) ether anesthesia, (h) the injection of adrenalin.

Whether the crisis be precipitated by a single one, or by several of the factors named, or whether the crisis occurs merely in the natural course of the disease, the symptoms and—in fatal cases—the mode of death, are identical. What then is the common factor which is activated by these divergent exciting conditions? What can be the common factor in asphyxia, in excessive oxidation, and in emotional excitation; in tonsillitis, and in hemorrhage; in physical exertion and in inhalation anesthesia; in physical injury and in autointoxication? What common factor is activated by each of these conditions and by the injection of adrenalin? Each of these excitants alone, or combined with others, causes an identical phenomenon—a "thyroid crisis".

Before attempting to identify this common factor, let us look at the negative side and enumerate the conditions that tend to prevent or to mitigate the phenomena of hyperthyroidism or that have no effect upon them.

Rest and sleep and sedatives and narcotics are incapable of producing a thyroid crisis. Each tends to mitigate the symptoms of hyperthyroidism. Digitalis, strophanthin, atropin, sodium bicarbonate and glucose, food and water, local anesthetics, cathartics, calcium and magnesium, cold applications, have no effect. Even iodin and thyroid extract can cause no acute outburst of hyperthyroidism. Electrolytes and bromids produce no specific effects. Not only is there

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a limited number of specific excitants of the crises of hyperthyroidism, but also these specific excitants lose their specificity and become impotent as far as causing a crisis is concerned when, after thyroidectomy, hyperthyroidism has been replaced by myxedema. Thus in myxedema even adrenalin loses its specific effect; and injury, emotional shock, infection, hemorrhage, asphyxia, anesthetics, etc.,—none of them—will cause a thyroid crisis, though each may cause death.

It is obvious, then, that thyroid activity is an essential factor in the production of the crisis of hyperthyroidism, but that it is not the only essential factor is seen in the fact that no amount of thyroid extract can cause an immediate acute crisis, although after a latent period of about 12 or more hours there may be an exacerbation of the symptoms. In the state of acute hyperthyroidism, any one of the specific factors already mentioned will cause an immediate outbreak within a few minutes, while an intravenous injection of adrenalin is instantly followed by a violent crisis which may result in immediate death.

Among the excitants of hyperthyroidism mentioned above, the effect of each has been stepped up and made specific by some factor in the mechanism of hyperthyroidism itself; and yet in the normal individual each of these produces some of the phenomena of hyperthyroidism in a mild degree; that is, physical injury, emotion, acute infection, ether anesthesia, hemorrhage, physical exertion and the injection of adrenalin cause increased action of the heart, perspiration, increased respiration, nervousness, restlessness, tremor, dilated pupils, anxious facies, etc.

It is significant that the injection of adrenalin alone causes all these symptoms. Is the secretion of the adrenals, then, the common factor? Strong emotion, as Cannon has shown, causes an increased output of adrenalin. Physical injury, the excitant stage of ether anesthesia, asphyxia, hemorrhage, foreign proteins, each may cause an increased output of adrenalin.

On the other hand, the factors which minimize hyperthyroidism, or which have no effect, such as sleep and rest, water, sedatives, narcotics, cathartics, blood transfusion, saline infusion, are not known to increase the output of adrenalin. And of prime significance is the fact that no case of hyperthyroidism has been known to be associated with Addison's disease.

Another well-known fact seems pertinent, namely, that although a ligation of a superior thyroid artery diminishes the activity of the thyroid, yet a thyroid crisis which may even be fatal may follow ligation. Moreover, although enough thyroid tissue may be removed to lead later to myxedema, a fatal so-called hyperthyroidism may follow the operation. These two facts indicate that the moving factor in the postoperative hyperthyroidism is neither the current thyroid activity nor the throwing into the circulation of an excess of the thyroid hormone by the surgical manipulation, for an operation of equal magnitude on any other part of the body may cause an equal typical exacerbation of hyperthyroidism.

The above cited facts seem to indicate that the specific agent causing the thyroid crisis is adrenalin; that only such factors as cause an increased output of adrenalin can cause the specific excitation which is called a thyroid crisis; and that the specific effect of these factors is due to the adrenalin which they cause to be secreted. On the other hand, the factors and agencies that either mitigate or have no effect on thyroid crises have no power to increase the output of adrenalin. The acute crises, in fact, may be called *adrenalism*. But adrenalism, in turn, can be produced only on the background of previously increased thyroid activity. Thus the syndrome which we call hyperthyroidism is really a *hyperthyro-adrenalism*, for without the thyroid hormone, as in myxedema, adrenalin loses its specific effect; and without the adrenal activity the thyroid would lose its specific effect, as is shown by the fact that in Addison's disease the lowered metabolism and depression are not overcome by the administration of the thyroid hormone. Another established clinical fact also supports the idea that such a relationship exists between the thyroid and the adrenals, namely, that when the sympathetic innervation of the thyroid is broken, even incompletely, the symptoms of the disease are minimized—metabolism falls, weight increases, nervousness, tachycardia, etc., are diminished—a fact that indicates clearly that the thyroid is driven, at least in great part, by the vegetative nervous system; that the vegetative nervous system is driven by the adrenal glands and the adrenal glands by the nervous system. In fact, we must not forget that without the nervous system, the brain and the vegetative nervous system, the thyroid and the adrenals could not collaborate—could not play their essential rôles. Lower animals have adrenal glands, a thyroid gland and a vegetative nervous system, but they are incapable of experiencing hyperthyroidism—only man with his higher brain development suffers from this affection.

Hyperthyroidism is obviously more than a thyroid disease; it is more than a thyroid-adrenal disease; it is a disease which involves the entire mechanism of man.

But we have now proceeded as far as our clinical facts and reasoning carry us. Let us seek in experimental findings another line of evidence. Happily a new line of trial evidence helps to fill the clinical gaps, and carries the problem into the field of bio-physics.

BIO-PHYSICS

We shall endeavor to interpret the nature of the specific action of the thyroid and of the adrenal glands on the tissues and organs of

the body in terms of certain physical constants, giving only the conclusions from the experiments, the detailed data of which will be published elsewhere.

After a latent period of twelve or more hours iodin and thyroid extract increase the electric conductivity and the capacity of the organs and tissues of the body. In physiological terms, a change in the conductivity and capacity of a tissue signifies a change in the function and the activity of that tissue. These physical changes, like the clinical changes due to thyroid activity, are lasting and not fleeting. Increased conductivity and capacity means increased functional activity. These changes alone would increase oxidation, hence would increase basal metabolism.

These findings are comparable to those in similar physical measurements of plants, of growing tumors, of fertilized ova, etc. It may be urged that what we have measured is a change in the concentration of the electrolytes in the tissues or changes in blood supply. It is true that the changes in conductivity and capacity which we have measured are in part due to changes in electrolytic concentration, but changes in electrolytic concentration constitute an essential part of the mechanism of stimulation and appear coincidentally with changes in the permeability of the cell membranes. Moreover, changes in conductivity and capacity are found in tissues after death, when such changes must be independent of the circulation. These electrical changes run parallel with the clinical phenomena.

Our experiments have shown that the effect of adrenalin on the capacity and conductivity of tissues and organs is wholly different from the effect of thyroid extract and of iodin; that is, while the effects of thyroid extract and of iodin are not manifested until after a considerable latent period, adrenalin causes an immediate and a striking change in capacity and conductivity. Moreover, the effects of adrenalin last for only a few minutes while the effects of thyroid extract and of iodin last for hours and days. The most striking characteristic of the adrenalin effect, however, is its unexpected selective action on the organs and tissues of the body; that is, adrenalin causes a sharp rise in the conductivity, temperature and capacity of the nervous tissue, but shows the opposite effect on the conductivity, temperature and capacity of all other tissues, with one notable exception,—namely, the medulla of the adrenal gland itself. At first this highly selective action of adrenalin on the tissues and organs seemed incomprehensible until it occurred to us that differences in the potential of the organs of the body might well depend on this very effect.

Electric Potential of Living Tissues: It would appear that the organism as a whole has been evolved on the principle of electric control, and that it is the function of the adrenal glands and of the vegetative nervous system to establish and to maintain and adaptively to change the differences in potential among the different organs and tissues, in order to meet the conditions of struggle and survival, such as fighting or escaping, mating and procreating, combatting infection, etc. If this conception be true, then not only is there a collaboration between the adrenals and the thyroid but there is a collaboration among all of the organs and tissues which are concerned not only with the struggle of life but with the maintenance of life itself. In accordance with this conception, if we were to measure the difference in potential between various organs and a neutral tissue such as fascia, we would expect to find that during life and consciousness a certain difference exists and that at death this difference is cancelled. We would expect to find that adrenalin would specifically alter differences in potential in the normal animal and that in myxedema it would exert but little effect on the difference in potential. We could expect that alterations in potential would be related to the physiologic activity of the various organs; and that the activity of the organs would be related to the thyroid hormone, which controls the conductivity for the longer periods, and to adrenalin, which controls the conductivity for shorter periods. These theoretical assumptions have been proved to be facts by the experiments performed in our laboratory by Dr. Telkes.

We may assume that the thyroid hormone by increasing the permeability increases the activity of the cells and organs, of the brain, in particular. Increased permeability would make more effective every kind of stimulation. This would be one of the essential factors of nervousness—perhaps the mechanism by which it is produced.

In myxedema, on the other hand, the conductivity, capacity and potential are decreased far below the normal level; and in consequence, the permeability, hence the facility of stimulation is decreased proportionately. This would explain the decreased metabolism, the depressed facility for stimulation and the decreased bodily activities—dullness and lethargy—in clinical cases of myxedema. And as a climax to these observations we have found that when an animal is in myxedema, adrenalin has lost its striking control over the conductivity, capacity and potential,—a finding which parallels the clinical observation of the lack of effect when adrenalin is injected into myxedematous patients.

Specific Reaction of the Medulla of the Adrenal: We have found that the injection of adrenalin into the vein of the ear of a rabbit causes a sharp rise in the conductivity and the capacity of the medulla of the adrenal,—this effect being as striking as the effect of adrenalin on the brain—and in the same direction. It would appear from this finding that the medulla of the adrenal functions as nerve tissue; per-

haps it is the brain of the vegetative system, its probable function being to charge up—to energize the vegetative system. The embryologic origin of the medulla, the type of its cells and the kind of tumors that arise in it, all point to the same inference.

In his illuminating work on the adrenal gland and his interpretation of its function along the lines of evolution which was referred to in my Ether Day Address, Cannon surely took an important step in the direction of this conception.

Now, if the adrenal gland energizes the nerve tissue of the body in some such manner as a power-station energizes an electrical system; and if our conception of the rôle of the adrenals in hyperthyroidism is correct, then we are in a position to find important clinical evidence bearing on this point, namely, to note the effect on the whole organism and particularly on the thyroid gland of removing one adrenal gland in cases of hyperthyroidism. It would at once be objected that the factor of safety of the adrenal tissue is so great that the removal of one adrenal would show no effect. In normal cases this would be true, but in hyperthyroidism, the adrenal, like the thyroid, has had its factor of safety fully taken up by excessive friction and one would expect, in accordance with our conception at least, that by the removal of one adrenal, like the removal of half of the thyroid, the hyperthyroid phenomena would be correspondingly reduced.

We have performed this operation in four cases of hyperthyroidism, and in those four cases the immediate clinical results were comparable with those which follow the removal of one lobe of the thyroid gland. The pulse rate was lowered, the nervousness, sweating and weakness decreased, the lost weight was regained, the untouched thyroid gland diminished in size and grew firm in texture, as after a successful ligation or a successful rest cure; and of equal significance, although the operation was much more severe and of longer duration than a thyroidectomy, there was but little postoperative reaction, that is, little so-called postoperative hyperthyroidism. And why should this not have been the case, for according to our point of view, one-half of the electric generative plant of the vegetative nervous system was removed! This evidence is too meager to be conclusive and is offered only as so much evidence in favor of our general thesis.

How interesting that the symptoms of hyperthyroidism are so completely "adrenal" in nature—the driven heart, the activated nerves, the increased metabolism, the sweating, the vasomotor instability, the dilated pupils, the increased pulse pressure, all of these show a sensitization due to adrenalin. What is accomplished so strikingly by merely cutting off the sympathetic nerve supply to the thyroid gland may apparently be achieved on a much greater scale by the removal of one of the generators instead of by merely severing some of the feed wires.

The thyroid is governed, at least largely, by its innervations; innervation is regulated largely by the adrenals; the adrenals are controlled by the brain and nerve centers, though chemical activity probably plays a rôle. The thyroid certainly cannot originate hyperplasia, the thyroid has hyperplasia imposed on it; the adrenal glands cannot stimulate themselves, stimulation is imposed upon them; the nerve receptors cannot engage in self-excitation, excitation is imposed on them by the physical and chemical forces of the external and internal environment. The entire nerve mechanism, the adrenals, the thyroid, and in a secondary sense other ductless glands, act reciprocally; that is, nerve tissue, the adrenals, the thyroid tissue collaborate in a stepping-up process—a stepping-up of activity. In certain individuals, because of some previously existing unknown factor, some chemical or physical unbalance, the normal controls become inefficient or are lost—and a reciprocal excitation continues after the environmental excitation that initiated the activity has ended.

In any event, the disease we call hyperthyroidism displays the automatic mechanism of the organism in so dramatic a manner that we are able to view man as if under a physiologic microscope through which we may glimpse his normally concealed, quietly-running automatic mechanism. The measurement of the actual potentials in the organs and tissues of the body; the relation of these potentials to activity and to death, give us an interesting clue as to the government of the body as a whole by the trigger action of a special sense here, of a brain center there. By these measurements we can see how the command of the organism is changed in kaleidoscopic fashion by the myriads of adequate stimuli. The extent of change in potential—whether it be a behavior reflex or a thought reflex—is a conjoint function of the thyroid, the adrenal, and the nervous system, controlling the rate of oxidation, forming fleeting oxidation potentials and rapid movements of the electrolytes in and out of cells. The measurements of potential, of conductivity, of capacity, and of temperature, reveal the fundamental biophysical forces that control the organism. Interesting interpretations are suggested by this hypothesis. For example, how often we discern in the "hyperthyroid" high school or college girl a pathologically high scholastic standing! Her social personality is attractive because her potentials are high and her receptors are sensitive. If this same girl is subjected to the removal of too much of the thyroid gland, she will become mentally dull and physically uninteresting.

Let us think of man as having emerged from the sea, holding in his body the formula of the sea. The unicellular immobile ancestor of man required but little change in the concentration of the activating iodin; he required but little

change in the concentration of an antagonist such as calcium, but little change in the concentration of the significantly active electrolyte sodium chlorid, and but little change in the rate of oxidation; but as the descendants of our relatively immobile unicellular ancestor became restless and aggressive, they finally reached the stage when it was necessary to centralize the mobilizing iodin in one gland—the thyroid—and to put this gland under electric control; to centralize the antagonist calcium under the control of the parathyroid glands and to place the government of the activating and controlling changes in electric potential—whereby the rate of oxidation and the movement of electrolytes are varied adaptively in response to environmental stimuli under the joint control of the nervous system, the adrenals and the thyroid—these three together forming the basic adaptive controlling mechanism of the animal organism.

Discussion

Dr. Aub: I have heard Dr. Crile speak several times and it has always been a pleasure, as he has a great many interesting ideas, and today is no exception. It happens that I am very glad to discuss his talk tonight, because I have done some work related to this subject. I am interested to hear him say that hyperthyroidism is a disease which is not limited solely to the thyroid, for I agree with that view. Some years ago I did some experiments to try to find out the relationship between the thyroid, the adrenals and the central nervous system. The way to determine this, it seemed to me, was through the metabolism, and we studied the effect on metabolism of these three factors.

We made animals hyperthyroid, anaesthetized them, took out the adrenals, and studied the effect. Our immediate results were different from Dr. Crile's. We increased the metabolism by the administration of thyroxin and attempted to determine whether the increased metabolism produced in thyroxinized animals was due to thyroxin or whether it was dependent upon the adrenals and nervous system. The removal of the adrenals in these animals did not produce a drop in metabolism. We also found that denervation of muscles did not lessen the increased metabolism after administration of thyroxin. That is, thyroxin increased metabolism directly, and not through the adrenal glands or through the muscular tremors. In further experiments we found that the removal of one adrenal had no effect on the metabolism, whereas removal of both caused a prompt reduction of metabolism.

One question I would like to ask Dr. Crile: What is the blood sugar when people go into thyroid crises? Some years ago in the *Johns Hopkins Hospital Bulletin* a case was reported of a person who had a thyroid crisis in which the blood sugar was found to be very low. This interested me because in thyroid crises, if due to a tremendous increase in adrenal secretion, one would expect a high blood sugar. I would like to say again that I have greatly enjoyed Dr. Crile's presentation.

Dr. Lahey: Dr. Crile's papers are always extremely interesting. I am not always able to discuss them because I must not pose as fully comprehending his remarks on physiology. My remarks must be confined entirely to the clinical side, to what I know from the literature regarding the sympathetic nervous system and experimental work. This difficult question of acute critical hyperthyroidism, however, is constantly arising in our dealings with thyroid cases. We have had unusual experiences with the emotional crises of acute hyperthyroidism. I recall two cases distinctly. One was a young girl with acute hyperthyroidism, on whom we ligated both superior poles. The wound healed well, she had left the hospital, and was doing well until one day, while sitting at the window, she viewed a gruesome automobile accident, and, as a result of the emotional outburst, died in two days with acute hyperthyroidism. The other patient was also one who had the poles ligated, had gone home and was doing well. Her father died while she was at home, the patient went into acute hyperthyroidism from the emotional shock, and likewise died in an acute crisis of hyperthyroidism.

As far as the practical clinical problem is concerned, we must all learn the management and early diagnosis of these thyroid crises. Just as Dr. Joslin and other men interested in diabetes have taught the family physicians the early diagnosis and management of diabetic coma, so must we teach the medical public the early diagnosis and prophylactic management of impending thyroid crises. We have seen these patients come into the hospital in such late stages of crises that the majority of them have died, and I think that if, in many instances, they were recognized early and properly treated, the majority would not have died. Had they had morphine, iodine, glucose and fluids early enough, many of the cases would not have been fatal.

Regarding the question of the vegetative nervous system and the thyroid, I do not know much, but I do feel that effect of ligation of the superior thyroid poles on the thyroid is very uncertain. We have no conclusive evidence that the thyroid is innervated by the sympathetic nervous system. If Dr. Cannon's interesting experiments had been proved by repetition we would be in a better position to believe in this sympathetic innervation. He transplanted the phrenic nerve into the superior cervical ganglion with the idea that each descending impulse along the phrenic nerve would stimulate the thyroid, and obtained results in cats which he concluded showed evidences of thyroidism. These experiments have not been successfully

repeated, however, by other experimenters. Proof that ligation of the superior thyroid pole interrupts its innervation, therefore, is doubtful. We have practically given up ligation since iodine has come along, and I have always been not at all certain that the effect of ligation has not been a psychic one rather than an interruption of nerve conductivity and interruption of vascular supply.

We are all indebted to Dr. Crile, especially those of us who are dealing with thyroid disease. These experiments deal with some of the disturbances which are so confusing and difficult to interpret.

DR. LUND: One of the most interesting points in Dr. Crile's paper was the effect of the adrenals and other factors in increasing the effect of excessive thyroid. The interrelation of the thyroid and nervous system was studied in a different way by Dr. E. B. Benedict and myself. We studied the effect of morphine on hypothyroid and hyperthyroid animals. The way the experiments were run was as follows: We determined the normal metabolism first. Then we determined the metabolism immediately after a dose of morphine, that is, one-half to one hour later. We gave the same dose of morphine proportionately to each animal and gave large doses always. The effect was that it caused a drop in metabolism of ten per cent. We then took out the thyroid, saving the parathyroid so that tetany would not occur. Then the metabolism was again determined, and was found to be thirty per cent. below normal. The same dose of morphine given to these animals whose metabolism was thirty per cent. below normal caused a further drop of twenty per cent. We then brought the same dogs to hyperthyroidism by feeding thyroid or injecting thyroxin and repeated the dose of morphine. The metabolism was not decreased by the same dose of morphine. The reason we used metabolism as an index of action was because it is one of the few indices we could quantitate in the laboratory.

DR. MEANS: I have been extremely interested in Dr. Crile's presentation, but I am neither physicist nor metaphysician enough to discuss it intelligently. I am sure that there is a relationship between the adrenals, the thyroid and the nervous system. I think the thing is very confusing as yet, and that Dr. Crile's studies may throw light upon it. There is one thing about the crises of exophthalmic goitre which might be mentioned. That is the effect of iodine. One of the most definite findings in late years is that the extraordinary crises are in a large measure preventable by saturating the individual with iodine beforehand. People seldom have the crises if they have been given large doses of iodine beforehand. I don't know how to interpret this fact, but it is a very interesting one. An individual who has not had iodine is in a peculiar state. If Dr. Crile will point out why iodine stops these crises it would be worth while. Also, if he would say precisely what the operation accomplished on the patients on whom he did an adrenalectomy, the exact postoperative symptoms and so on, it would be of great value. I would also like to know whether at autopsy there was any evidence of alteration in the adrenal glands.

Speaker from the floor: If the adrenal glands are removed, the blood sugar falls, and in Addison's disease the blood sugar falls very low. Is it conceivable that the failure to get thyroid crises in cases where the adrenals have been removed is due to a failure to mobilize the sugar?

DR. CRILE: I am sure that if I have accomplished nothing more than to raise this interesting discussion, I have done something worth while. Dr. Aub has raised a question which I cannot answer. I offer these four cases only as a piece of evidence. We followed a number of cases in regard to sugar tolerance and found no difference.

Don't, by the way, refer to removal of the adrenal glands; it is only one.

Dr. Henry John has followed a large number of cases as to blood sugar, and tried in crises to see whether he could influence the crises by insulin and glucose. At first it was thought that they were effective, but afterwards it was decided that the results were not conclusive.

Dr. Lund's work on morphine is certainly very interesting.

Dr. Means also asked a question which I cannot answer—in what way does iodine influence the crises of hyperthyroidism?

In 17,000 patients with operations on the thyroid gland we have done a little over 2,000 ligations, and what a satisfaction it is for us to make a trial ligation in a few minutes' time. If we are in doubt as to whether the patient is a good risk, then a trial ligation is of great help. Then we may later do a double lobectomy with good results. The mortality is one in one hundred and fifty. I have had a sufficient number of catastrophes to go very cautiously. One must decide from his own experience and the kind of work he is doing what procedure to follow.

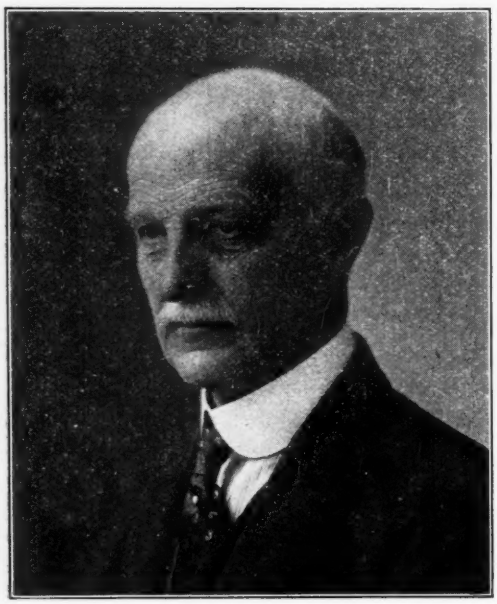
I appreciate the very kind attention which has been given to me, for my paper was altogether too long.

JOHN WHEELOCK ELLIOT, M.D.

BY ERNEST AMORY CODMAN, M.D., F.A.C.S.*

EDITOR'S NOTE. This biographic sketch of Dr. Elliot has been taken from a longer manuscript entitled "Doctor John Wheelock Elliot and his Part in our Local Surgical History". Dr. Elliot's contemporaries, Dr. Henry L. Morse, Dr. Alfred Worcester, Dr. J. J. Minot and Dr. J. W. Farlow, have made the selections and revisions. Dr. Codman's more detailed original manuscript in typewritten form will be placed on file at the Boston Medical Library and the library of the Massachusetts General Hospital.

DR. ELLIOT'S contemporaries may be surprised that I find his career to be so much of a landmark in our local surgical history. In writing of a surgeon who was my teacher and friend, I am thinking especially of the alumni of the interne staff who worked under him at the Massachusetts General Hospital in the years from 1886 to 1907. Belonging to a slightly younger



JOHN WHEELOCK ELLIOT, M.D.

generation just too late to see the advent of antisepsis, we received our hospital experience when modern surgery was practically established, and did not realize that the young men who were our immediate seniors had fought the conservatives of the previous generation and thus made the way easy for us. Much as we admired the other members of the staff of that generation, I believe we are especially indebted to Dr. Elliot, although at the time we hardly realized his mental influence on his seniors and colleagues or the effect of his example on our own minds. We were too young and too busy to see what we owed him.

Dr. Elliot's ancestors settled in New England in 1750. His great-grandfather was a soldier at Bunker Hill. His grandfather's name was spelled with one L, but the spelling was later changed to accord with that of the Scottish clan from which the family came. He was born in Keene, N. H., on October 10th, 1852, son of John Henry Elliot, a lawyer and distinguished man in his state, and Emily Ann Wheelock. He entered Harvard from Phillips Exeter Academy, graduating in 1874, and from the Harvard Medical School in 1878, having during the last year also served as interne at the Massachusetts General Hospital. He then studied abroad and began practice in Boston in 1880. In 1883 he married Mary Lee Morse of Boston.

Elliot's success in practice came early. His patients as a whole were of two classes, the rich and the poor. He was punctilious in his care of hospital patients. When on service at the Massachusetts General Hospital he gave them a larger share of his time and attention than did most surgeons. The house staff all knew that on his term of duty things would go well, the wounds would be clean, there would be no neglect, and his eye would certainly detect any lack of thoroughness, although his comment would never be sneering or rude. Yet we younger men knew that when he came on duty and we undertook any unusual responsibility which we felt we were competent to assume we would get his thanks and advice rather than adverse criticism.

After I started in practice in 1895 I used frequently to assist Dr. Elliot in his private operating, which then was done largely in the patient's home and only occasionally in private hospitals. At the time it was the right way and Dr. Elliot strongly believed that there was less danger than in a hospital. For instance, I recall helping him operate for a brain tumor in a small private house in a suburb. We did hysterectomies and gall stone operations with as little academic pomp and, as a rule, quite as successfully as we do now with all our ritual. I often think that the young surgeons of the era of early asepsis were more careful than those of today. On November 26, 1886, Dr. Elliot wrote, (*Boston Medical and Surgical Journal*) "In doing a laparotomy I have always taken the entire charge of my instruments and sponges, never allowing assistants to clean or prepare them", but by the time I assisted him, 1895, he was ready to leave the preparations to me. This was ten years after he had introduced the fundamental innovation of gauze sponges, which was a most important step toward aseptic surgery, more important than any single point in the new aseptic technique. How easily we forget the origin of such indispensable steps! Both Dr. A. T. Cabot and Dr. M. H. Richardson credited this innovation to Dr. Elliot. How simple it seems now to have a sponge that can be

*For record and address of author see "This Week's Issue," page 1013.

steamed or boiled! Previously sea sponges were universally used. They could not be boiled and had to be soaked a long time in antiseptics and even then could never be made clean. His first sponges were of absorbent wool sewed up in gauze. They were better than those we use now, but the trouble of sewing gauze about the wool led to the mere folding of the gauze and leaving out the wool.

Many who were not close enough to his personality to see more will remember the erect, handsome, immaculate, cool surgeon demonstrating in the amphitheatre. He gave the impression of controlled force and one felt there was a reserve of energy which he could use but would never need. His aim was to be excellent in everything he did, in writing, in diagnosis, in operating or in sport, but he did not care to compete in excellence. Perhaps this was lack of ambition, but I cherish his example. He did not over-reach in anything. He seemed to know his limitations in action or in thought, and what he attempted was always possible. Thus he operated with little apparent effort, for the possibilities to be achieved had been thought out beforehand.

I think he personified equanimity as well as any man I ever knew. To surpass others—at least to receive recognition for outdoing others—was not consistent with his plan of life. He did not wish to become a famous operator for he saw that this meant incessant operating, delegating undue responsibility to assistants, the risks of hurry and of lack of care. A single private operation was to him a day's work, with every detail thought out beforehand and every step executed with nicety. Yet he rarely took much time for the operation itself. He held that no operation should require more than one hour. He would not have been himself had he become an operator pure and simple. Yet he was as neat and clean and quietly dexterous as any operator I have ever seen. Those who were his assistants had, at least, the opportunity to learn the perfect care of a private patient. His sense of responsibility to anyone whose care he had undertaken was very strong and he left no stone unturned to insure success. He could not half-do a case in a hurry to meet another engagement. Great operators must often do this to attain their greatness, and the best surgery is not always done by great operators.

Dr. Elliot was not a remarkable student; he was well read in surgery and kept abreast of the advance of knowledge, but he was never actually recognized by the profession at large as a profound student. His was not a single track mind, capable of following a protracted investigation in any one field. Neither was he of the extraordinary calibre of mind which makes a few great men capable of conducting their practices super-satisfactorily and yet have time to conduct researches or ride hobbies. He recognized this and was content with excellence in what he wrote or said or did. That he might have become "great" but preferred to be a broadminded councillor and friend to a relatively small number of patients, is the only criticism I have ever heard of him worth mentioning. To my mind one of the best things to learn from Elliot's example is that friends and family are not to be sacrificed to personal ambition.

It has interested me recently to read over all of his writings from a critical point of view in order to see whether the conclusions he came to have stood the test of time. All of his papers are concise and clear and give the impression of unusual ability to select important essentials and to avoid the temptations of interesting vistas of unproved hypotheses. Their very brevity is a mark of much work and thought, for in each are compressed all the important facts. His papers cover the whole field of surgery, the realms which are now gynecological, genito-urinary, abdominal, neurological, traumatic. He studied a few of his own cases in each field carefully; briefly summarized the opinions in literature which he respected; drew the conclusions which he considered important for every surgeon to know; added helpful suggestions from his own experiences and illustrated them by reports of their use in successful cases. Thus each paper is a brief, clearcut study of the status of the surgery of each field at that date. And the wonderful part is that each and everyone of his papers is sound today from 25 to 40 years later, although each subject on which he wrote was at that date only a few years old and still in the experimental stage. One might pass a medical student in surgery if he knew thoroughly these 20 odd brief papers.

Even now for those of us who were his assistants 30 years ago when the practice of surgical antisepsis and asepsis were fully developed, it is hard to realize that Dr. Elliot's first surgery was in pre-antiseptic days when surgeons did their daily operating in the same frock coat unsterilized and even infrequently cleansed. In those days ligatures were carried in the buttonhole and the same sea sponges were used repeatedly without sterilization. By reviewing the records of the Massachusetts General Hospital of the years 1877 and 1878 when he was a "house pupil", as the assistants of those days were officially called, I have gleaned a fair idea of the example which was set in antisepsis. Through the enthusiasm of Dr. J. C. Warren, who had returned from his studies in Europe, Lister's spray was being intermittently tried out by Dr. Warren, Dr. Beach, and a few others. Evidently several of the surgeons did not bother with it and Dr. Warren was working against odds. The technique was merely the use of the spray during operations and the first dressings; the instruments were not boiled, the field of operation prepared, the hands cleansed or the garments changed, although some surgeons were

beginning to carbolize their instruments and hands as well as the field of operation. My reading of the post operative records shows that healing by first intention was the exception. The results were not striking. Dr. Warren in this, as in many instances within my own memory, bore the burden of introducing a valuable idea into the hospital in the early stages of its development, when criticism and friendly ridicule were his only rewards. The Library of the hospital has a reprint of a later article by Dr. Warren which gives a most interesting account of his experience with the introduction of Lister's ideas. (*Boston Transcript,* March 13th, 1912.)

After graduating from the hospital Dr. Elliot went abroad to study and it appears from a letter to the *Boston Medical and Surgical Journal* which he sent from Volkmann's clinic at Halle (December 19th, 1878) that his chief interest was in the antiseptic methods. "These details concerning the dressings seem to us especially interesting, because we find Prof. Volkman operating in a dirty old hospital, so small that many important cases are from necessity treated as out-patients; personally never even directing a dressing, and rarely going into a ward, yet having most remarkably good results. First intention seems to be the rule, and not the exception." On this journey he visited also Weimar, Vienna, Dresden, Berlin, Paris and London and attended the clinics. Evidently he discerned the coming importance of the aseptic technique and the necessity of completeness in the exclusion of germs not only from the air as by the Lister Spray, as he had seen it used in his interne days, but also the more important facts that the field of operation, the instruments, draperies and hands of the operator must also be free from germs. Of course carbolic acid saturated the surgeon and the patient, and an occasional clean wound was found, due to the efficiency of this still most reliable antiseptic. On the other hand, varying degrees of carbolic poisoning constantly occurred if the raw surface of a wound was at all extensive. Reading the hospital records of that time one constantly finds the darkness of the urine mentioned and in some cases it is pretty clear that death followed the carbolic rather than the operation. Prominent surgeons still opposed the new ideas. Tait in January, 1885, (*New York Medical Record*) five years after Dr. Elliot returned from abroad, said: "Listerism had no influence one way or the other" on his mortality in ovariotomy, which was only about 8%, and he showed comparative statistics of cases in which he had, and had not, used it. Today we pay little or no attention to spraying the air. The prevailing ideas of this time were probably well represented by the following quotation from a lecture by Prof. H. J. Bigelow printed in the *Boston Medical and Surgical Journal,* June 5th, 1879. It is also an interesting example of the fluent style of that famous teacher: "I have learned that whatever be his method, the duty of the surgeon is to act as if the particles made visible by a sunbeam, were noxious, falling like snowflakes during every operation and every dressing, seeking to insinuate themselves into the wound at every crevice." At that time the idea of germs or bacteria was only a vague conception to scientific men in general. It is quite likely that some of Elliot's professors in the medical school could not have explained the ordinary phenomena of putrefaction; for although Pasteur had done this in 1857 and Lister had applied similar ideas to wound infection in 1867, another decade had to be consumed in demonstration, confirmation, diffusion and education.

Clearly Dr. Elliot did appreciate the coming change and his trip to Europe was at just the right time to obtain the first teaching in the new field of bacteriology. On returning he wrote a paper published in the *Boston Medical and Surgical Journal* for October 7th, 1880, on "Antiseptics in Gynecology", which is in fact a review of what he had gleaned in Europe at the laboratories on the continent where he had sought out and studied under the men who were using the newly-discovered bacteriology. In the year 1879 they had just begun to search pus for microorganisms. The staphylococcus had not yet been identified. There was still doubt as to whether micrococci were the cause or result of suppuration. The tubercle bacillus was unknown and in fact few separate strains of organisms were known. They were merely classified as bacilli, cocci, etc. (Ogston, *British Medical Journal,* 1881). If one remembers this and reads Elliot's article and considers the contemporary knowledge as compared with the slight changes which surgical technique has undergone since his paper was written, one must pay a tribute to the clarity of his foresight. The practical parts of his paper stand today.

Thus he returned to Boston knowing what there was to be known about germs and why *complete* precautions were necessary. This understanding of the theory made him carry out the ritual more intelligently. He soon gave up the spray in consequence. He appreciated asepsis rather than antisepsis and I believe he was one of the first surgeons to do so in this community and to teach it by example to most of his seniors and colleagues. His natural almost finicky desire for neatness and tidyness made him exacting in this technique and in our day he was scrupulously careful not to have his fingers come in contact with pus, holding that even the best of antiseptics would not be sure of removing every trace from the folds of the skin. He assigned one house officer to do all pus dressings and would not allow this man to assist at clean operations. Rubber gloves had not come into general use then, and did not for some time, although in the above mentioned paper in 1880 Dr. Elliot had said: "The operator, himself, should inspect the hands of his assistants,

or require them to wear rubber gloves". He may have seen them used in Europe. Dr. Elliot for some years used cotton gloves before rubber gloves were manufactured. Cotton gloves even when wet were far from an assistance in demonstrating dexterity, but what he was after was cleanliness which he knew was usually more important than dexterity. Now, we have all come to recognize this principle and a modern rubber glove fortunately does not interfere with our exhibitions of skill. It required conviction for a surgeon to use clumsy cotton gloves. The practical ingenuity to find application of sound convictions was very characteristic. The students who worked under him and read this will certainly feel a sense of gratitude that he insisted that they learn to the utmost detail the technique of keeping clean surgically, without the practice of which dexterity is a minor factor in success.

This paper on antiseptics was read before the Suffolk District Medical Society within a few months after Dr. Elliot's return from Europe and must have made a good impression on his seniors and have given him an exceptionally good start in practice. He was at once in demand as an assistant, and for two years helped Dr. John Homans in his private work.

The following quotations are from Elliot's article in 1880. Nothing of what I quote is original, but it is illustrative of his capacity of foresight. It is hard to put one's-self back in the frame of mind of the older men of that generation who listened to this paper, many of whom took no action in regard to it for several years.

"The best antiseptic surgeons can open a knee-joint or the peritoneal cavity with almost absolute certainty that no trouble will follow, and yet it is not uncommon for practitioners of today to lose patients from septicaemia or pyaemia following the simple operation to close a ruptured perinaeum or a lacerated cervix uteri or even a normal confinement. This striking contrast of results points out to us a path which seems worthy of investigation." He then describes in detail the strict regulations in force at the Winckel's (Obstetric) Hospital in Dresden, where no one is allowed to examine a patent without first scrubbing the hands with soap and a nail brush followed by disinfecting with carbolic acid. He sums up as follows: "The weight of microscopical and clinical testimony goes to show that puerperal fever and diseases caused by absorption of putrid poisons are one and the same. The finger of the examiner and his instruments are the carriers of the disease in the great majority of cases, and in cleanliness and antiseptics we possess both prophylactic and curative means."

At this time Dr. W. H. Baker was the prominent Gynecologist of Boston and had already built up a considerable clinic at the Free Hospital for Women which he had founded in 1875. Dr. Elliot became Dr. Baker's assistant and worked in this clinic in 1880 and 1881, and in 1882 he was appointed Assistant Surgeon. At the same time he was working in the Boston Dispensary where he taught gynecology to the Harvard Medical students and after two years was appointed Visiting Physician, a title which might have been Gynecologist, for his work was directing a very large female clinic. These two appointments gave him about the best gynecologic experience to be obtained in the city. That the work was hard, although the experience great, is shown by his first original paper on "Retroversion" published on February 28th, 1884. In this paper he says: "Out of 1500 gynecological patients who have come under my observation and treatment within the last three years there have been 89 cases of retroversion with adhesions, about six per cent." Such an experience in the first three years of practice meant industry as well as opportunity. The paper itself is well worth study today and his method of treatment would still be the best for the few cases in which operation is contra-indicated. However, both the modern woman and the modern surgeon would infinitely prefer a laparotomy. The introductory paragraph is as follows:

"This malady has been and is still considered by many incurable. In my own experience I have found these cases curable. I therefore venture to describe a method by which favorable results may be obtained." He then credits other writers who had used similar plans, and gives the details of his own technique. In 89 cases of adherent retroverted uteri he obtained a practical cure of 67. He says nothing in this paper about the intra-abdominal treatment of this condition, nor had it yet been advocated by others. Dr. W. M. Polk first reported four cases in 1887. At this time Dr. Elliot had been doing it, for he says: "When it is desirable to inspect or remove the ovaries or tubes by laparotomy (as will often happen in these cases, because diseases of the tubes so often cause retroversion with adhesions) the adhesions should be broken up and the uterus raised and stitched to the abdominal wall." I find in a case report that he had done a plastic operation on the broad ligaments to correct retroversion as early as April 24th, 1885 (*Boston Medical and Surgical Journal*, April 15th, 1886). This is perhaps not the first recorded case but is certainly among the first where the surgeon suspended the uterus in any way. It shows the influence of Dr. Elliot's intensive study of retroversion in his first three years. He appreciated that these women suffered and as in all his other "near priority" work was using his brains to consider how to relieve each particular patient. If he succeeded and if he thought it might become of general use to others he mentioned his expedient.

The only long articles he ever wrote (15 pages

each) were two. One was for the 1888 volume "Reference Handbook of Medical Sciences" on "Uterine Displacements". This paper and the one to which I allude later were entirely different in form from any of his other writings, for they were evidently written to cover a certain number of pages on assigned subjects on which he was recognized as an authority. I would defy anyone now after thirty years to write better articles or to give more real information to the average reader on these subjects. They display a wide knowledge of previous literature and a wise selection of points worth setting down in print as tested by his own personal experience. Of the first paper I would almost say that it contains all that is worth knowing about Gynecology in that era, stripped of the petty humbugs which characterized that specialty in the eighties and nineties. Elliot wrote it after ten years of gynecology with the enlightenment obtained by five years of intensive interest in laparotomy. His experience of countless pelvic examinations without laparotomy in his first years made him extremely careful and expert in this form of examination and competent to interpret the abdominal findings in his laparotomies. This paper, written at just this epoch, qualified him to select only the demonstrable truths of his former specialty. A surgeon today should know what is in that paper and need know little else about the subject, for the experience of 30 years of the whole profession has added little. Bimanual pelvic examination seems to be a lost art to the present generation which looks into the abdomen so readily. Just as the X-ray has taken the place of palpation in fractures, laparotomy has displaced the art of vaginal examination. I vividly recall Elliot's uncanny ability to prophesy in detail what we would find in the pelvis. In cases in which several tumors were found and he was uncertain which was the fundus of the uterus he first suggested the expedient of giving ergot to harden the uterus. (*Boston Medical and Surgical Journal* January 29, 1885).

The other long article is to be found in the International Text Book of Surgery, edited by Dr. J. C. Warren and Dr. A. Pearce Gould in 1900, an excellent book in its day. Should any student wish to know the essentials of "The Surgery of the Liver, Gallbladder, Biliary Passages and Pancreas", I could recommend him nothing better to read than Dr. Elliot's chapter on this subject. Even without the added knowledge which has come to us since that time from the X-ray, the duodenal tube and Graham's dye, the practical surgeon who had at his command what Dr. Elliot wrote in this chapter would be on safe ground. There is nothing which has been left out and every sentence is important. It is a fine example of this kind of writing which is one of the most difficult forms, necessitating as it does the ability to abstract and at the same time to proportionate.

That Dr. Elliot was a leader in this branch of surgery is shown by the following quotation from Sir Berkeley Moynihan's book on scription in direct quotation from him "Gallstones". On page 350 he gives a full deconcerning the method of placing a patient on the operating table with a sandbag under the back with the head of the table elevated, he said: "It is to Wheelock Elliot of Boston that we are indebted for the first demonstration of the great advantage to be derived from placing a patient in this position." "This position of the patient is as a fact indispensable for easy work upon the ducts." On page 301 he quotes in extenso Dr. Elliot's description of the removal of a stone from the hepatic duct and states that this was among the first few instances. It was the third case. Kochler, in 1889, had removed one but the patient died. Dr. Elliot's friend, Arthur Cabot, had removed one successfully in 1892.

Dr. Elliot was among the first in this country to do aseptic laparotomy. Of course this was mainly because he began practice at just the right time; but it is to his credit that he grasped the opportunity. To determine when laparotomy first became an established branch of surgery is no easy matter for there are records of herniotomy, caesarian section, incision of large cysts and abscesses dotted throughout medical history for centuries. Laparotomy or abdominal surgery as such may be regarded as beginning with the removal of ovarian tumors by Sir Spencer Wells (1850 to 1860), Lawson Tait and their contemporaries just prior to the antiseptic era, although McDowell the pioneer operated in 1809. The number was rapidly increased as Listerism spread. Lister had convinced many surgeons of the value of antiseptic precautions by 1870, but the surgical world as a whole had not adopted them even in the early eighties.

That laparotomy was not done to any extent in America at this time is shown by a review of the Transactions of the American Surgical Association from its formation in 1880 through a ten year period. From 1880 to 1883 inclusive there was but one paper read on laparotomy and this was merely an experimental study on ligating the ovarian pedicle in animals. In 1884 Dr. S. W. Gross reviewed the subject of intestinal resection, his father having collected from literature 67 cases with 23 recoveries. These were mainly haphazard emergency operations for strangulated hernia and were not modern purposeful operations. In 1885, Dr. C. T. Parkes of Chicago published a case of Cholecystotomy (December 19, 1884) and says "The entire number of reported operations falls within a total of 50". These for the most part consisted in incisions of tumors or abscesses which proved to contain gall bladders or gall stones. In 1886 Dr. Parkes reported two more cases of Cholecystotomy, and Dr. Christopher Johnson of Baltimore discussed the propriety of

"Diagnostitial exploratory laparotomy". In 1887, the propriety of laparotomy for gunshot wounds was discussed. In 1888, Bull of New York read a paper on "The Surgical Treatment of Typhlitis and Perityphlitis". In this paper Dr. R. H. Fitz's work giving "appendicitis" its name in June 1886 is first surgically recognized although rather half heartedly, because Bull evidently believed the majority of abscesses in the iliac fossa to be typhlitis. He recommends draining these abscesses and says "The propriety of exploring or removing the appendix must still remain subjudice." However he reports a case in which he did appendectomy.

As these were the *only* papers even relating to laparotomy and as Dr. Elliot had been doing laparotomies since January 1884 and had done appendectomy before Bull's paper was published in 1888, we can see that he was certainly abreast if not ahead of the times. He published in the *Boston Medical and Surgical Journal*, January 29, 1885, five successful consecutive ovariotomies four of which united by first intention. He had done fifteen with only one death (ovarian sarcoma) by the end of that year.

Up to this date there had been but eleven abdominal operations, mostly ovariotomies, done at the Massachusetts General Hospital of which eight had resulted in death, and of the three recoveries Dr. Arthur Cabot had recently done one and his father Dr. Samuel Cabot, in 1874 and 1877, had done two. (Information obtained from the Librarian Mrs. Grace W. Myers.) Dr. Elliot could have seen no successful laparotomies as a house pupil, as I have ascertained by inspecting the records made in his term of service, August 1st, 1877, to Aug. 1st, 1878. Of course the American Surgical Association and the Massachusetts General Hospital were conservative institutions, but it is clear that Dr. Elliot at 33 was a very successful surgeon of good judgment since he attempted and achieved good results and no bad ones in an operation at which the older generation were frowning and which was not being successfully done by the most prominent local surgeons or even discussed at the great national surgical meetings.

These statements do not tell the whole story, however, for while Dr. Elliot might have been discouraged by the attitude of the general surgeons at this period he had several encouraging examples from the Gynecologists. A review of the Transactions of the American Gynecological Association from 1880 to 1885 presents a different picture. There were a number of reports of ovariotomies and of a few hysterectomies.

There was also one surgeon here in Boston who had done a few abdominal operations. Dr. John Homans in 1887 published a monograph on 384 abdominal operations with a mortality of only 10%. Dr. Elliot had taken part in some of these operations for he had assisted Dr. Homans in 1881 and 1882. Dr. Homans had been a follower of Sir Spencer Wells. By sheer character he forced the recognition in this vicinity of ovariotomy as a practical curative operation. He took up "Listerism" in 1877 and his first case to recover was operated upon February 27 of that year at the Carney Hospital. At the time Dr. Elliot began to help him he had done only nineteen, of which the first five had died. All of these five were done before Spencer Wells' book was published which renewed his courage to do this operation. Dr. Homans taught much to Dr. Elliot but undoubtedly Dr. Elliot did much for Dr. Homans in showing him the technique of asepsis, for Dr. Homans' experience had been received chiefly in the Civil War before antiseptics were used.

Evidently Dr. Elliot had intended to practice Gynecology up to the time of his appointment at the Massachusetts General Hospital in 1886. Reading between the lines it is pretty clear to me that his appointment at this hospital was coincident with, if not the cause of, the passing of laparotomy from Gynecology to General Surgery in this community. It is not unlikely that in other cities at this time the best trained young abdominal surgeons were Gynecologists and as in his case were sought to fill the vacant places on the surgical staffs. Dr. H. A. Kelly on the other hand kept laparotomy for Gynecology in Baltimore.

Although in practice only 2 years, Dr. Elliot in 1882 started a small private hospital of his own. Evidently he was bound to have a place where he could open the abdomen under what he considered favorable conditions. Dr. W. H. Baker dominated the Free Hospital for Women, and the conservatism at the Massachusetts General Hospital seemed hopeless. Dr. Homans practically monopolized St. Margaret's Hospital. Dr. Elliot wanted to try out his own technique and apparently thought his best chance was to forge ahead by himself. It is not unlikely that this bold proceeding made his recognition and appointment on the out-patient staff of the Massachusetts General Hospital almost a necessity, for popular opinion would demand for him a place on the staff of Boston's famous hospital as it had done in the case of Dr. Homans (1882), although the latter had been shorn of his opportunity to do ovariotomy by the following vote of the trustees: "Provided also he understands and desires to comply with the restrictive policy of the hospital in relation to the practice there of specialties, particularly the specialty of ovariotomy". It was clear that gynecology had come to stay and would absorb abdominal surgery unless general surgery absorbed it. Dr. Cabot and Dr. Richardson, who were already on the staff, no doubt brought it about that their promising friend should bring his knowledge of gynecology to the Massachusetts General Hospital which then as now would not rec-

ognize gynecology as a true specialty. As there was no room for him on the staff he was given an appointment as surgeon to Out-Patients and only received an appointment to the staff in 1894, while his friends Dr. Cabot and Dr. Richardson had received their appointments as staff surgeons in 1886. At any rate, Dr. Elliot gave up his own hospital and devoted his energy to the Massachusetts General. Nevertheless he kept pace in abdominal surgery with his seniors as is shown by three papers published in the *Boston Medical and Surgical Journal*, in which each gave a complete statement of all the laparotomies he had done.

1. M. H. Richardson, Sept. 8th, 1887
2. J. W. Elliot, Apr. 5th, 1888
3. A. T. Cabot, Jan. 3rd, 1889

Analyzing these paper it appears that Dr. Elliot had done by March 15th, 1887, 25 cases, while Dr. Richardson had done 16, and Dr. Cabot 7. One of Dr. Richardson's cases was the famous one in which he removed false teeth from the stomach, an operation so striking that accounts of it appeared in the daily press from one end of the country to the other. This diffusion of the idea that successful abdominal section was possible was a fortunate thing for it made the public in general more receptive to the new ideas.

These three papers represent the beginnings of modern abdominal surgery in Boston. They were a different kind of abdominal surgery from the early ovariotomies of Dr. Homans who says in his little book "my incision is usually two inches long." In many of his early cases the operation merely consisted in tapping a cyst with a trocar, clamping or tying the pedicle and leaving the ties or clamps protruding through an open wound which was bound to be more or less septic, and often followed by a long convalescence. These young men all of whom had assisted him at times began the era of making wounds large enough to introduce the hand, permitting them to do much of the operation within the abdomen and finally to close the wound. Dr. Homans' work, although more crude, had the quality of greatness for he carried out his convictions in the face of odds and much animosity. These three young men profited by his example and soon sped beyond its influence.

Dr. Richardson at an obituary meeting for Dr. Homans (See *Boston Medical and Surgical Journal*, 1903) presented a charming contribution which vividly showed how much all these young men owed to their experience with "Honest John Homans".

It is hard to over-estimate the influence of Homans on the men of his period. His readiness to take responsibility and to cheer on his colleagues and assistants was extraordinary. On questioning the men who began practice in Boston in the eighties, I find that almost every one, no matter what his specialty has since been, proudly says, "I used to assist Uncle John". Among the gynecologists Baker, Davenport, Burrage, Haven and Storer saw their first abdominal surgery with Homans.

Through the kindness of Miss Ewin, superintendent of the Women's Free Hospital, I have obtained the following,—the first successful ovariotomy at this hospital was done by Dr. Homans on May 18th, 1881; the second successful case was done by Dr. Elliot in January 1884; the third successful case was also done by Dr. Elliot on March 31st, 1884. Drs. Baker and Homans were consultants.

Incidentally I may correct a false impression which prevails in this community that Dr. Homans was the real pioneer in ovariotomy in New England. He was, in Boston, but Dr. Gilman Kimball of Lowell, should receive this credit as may be ascertained by reading his obituary by Dr. F. H. Davenport in the 1892 volume of the Transactions of the American Gynecologic Association and also a paper by Kimball in the 1877 volume of the same journal. It appears that Dr. Kimball did many ovariotomies in the early seventies. He began operating in the fifties. His mortality was high and he only operated on desperate cases, but his services were in demand all over New England, even in Boston itself. It is easy to read between the lines that the conservative surgeons of Boston considered him an adventurer, but the above mentioned paper in 1877 demonstrates that he was truly a great surgeon.

I think it is not usually realized that the male abdomen had rarely been opened until the surgery of the appendix began in the late eighties fully a year after Dr. Fitz read his famous paper on June 17th, 1886. Fitz gave the name "appendicitis" to the varied conditions previously called typhlitis, typhloenteritis, perityphlitis, paratyphlitis, abscess of the appendix vermiformis caeci (Willard Parker), appendiceal peritonitis (With). He first thoroughly analyzed the whole problem of abscesses in the right iliac fossa and showed that disease of the appendix and not an inflammation of the caecum (typhlitis) was usually the cause of these abscesses. He pointed out that removal of the inflamed appendix would prevent the extension of the inflammation to the caecum and peritoneum in its vicinity. Nevertheless it took a long time for surgeons to appreciate and act on this reasoning for it was taboo to incise the peritoneal cavity in the presence of pus. One must read the literature of the times to appreciate the dread which surgeons then felt of contaminating the peritoneal cavity. They had opened the female abdomen for pelvic tumors and they incised a few "perityphlitic" abscesses which had become fluctuant, using great caution to avoid opening the free peritoneum, but not one had advocated crossing the peritoneal cavity to get the appendix or even to open an abscess.

Howard Kelly in his exhaustive book on ap-

pendicitis gives a most interesting review of the literature previous to Fitz's paper, showing how very near many other physicians were to appreciating the facts demonstrated later by Fitz. He then gives a chronologic bibliography of the early surgical contributions on the subject after Fitz's paper, Elliot's name being the fourth, preceded only by Weir, Bryant and Morton.

Dr. Elliot published in the *Boston Medical and Surgical Journal*, January 18th, 1888, a description of his first case operated on under the diagnosis of appendicitis. It was performed on November 5th, 1887. The patient was not only the first person in this community to have his appendix sought by the transperitoneal route but one of the first men to have his abdominal cavity opened for any operation.

In the late afternoon of November 3, 1887, Dr. Elliot was called in consultation by Dr. E. R. Cutler and Dr. H. A. Wood, of Waltham, to see a man, who had been sick for five days, with reference to the question of operation in a case of possible appendicitis. The patient was in a serious condition, with severe abdominal symptoms and a temperature of 101.5°. There was no cake to be felt. On account of the lateness of the hour it was decided to wait until the next morning. Dr. R. H. Fitz and Dr. M. H. Richardson were added to the consultation at that time. The diagnosis of appendicitis was confirmed and the prognosis considered unfavorable. As the pulse and temperature were both distinctly lower, it was decided to delay the operation. The following day, November 5, the condition was evidently much more serious and the same consultants decided that immediate operation was imperative. Dr. Elliot operated with the assistance of Dr. Richardson and Dr. Cutler. The incision was made in the right iliac fossa. The peritoneum was cut through. No pus was to be seen. The intestines were somewhat matted together. On separating these adhesions a large pocket of fetid pus was discovered. The cavity was cleansed and drained. No further attempt was made to find the appendix. After a stormy convalescence, the patient recovered completely in about a month and since then has had no further trouble.

Now that we are so familiar with appendicitis, it is impossible to reproduce the mental atmosphere of the participants at this operation. None of them probably had a conception of how common this operation was to become, yet five of them were to be among the foremost in giving mankind the present knowledge of the disease, and its proper treatment. At this date none of them had ever seen the peritoneal cavity opened to search for the appendix, or even to allow drainage of an appendix abscess. All probably knew of the two cases of Weir and Bryant, where the appendix had been removed, and the patients had died. None yet knew of the first successful case, that of Morton of Philadelphia on April 25th of the same year, for it was not then published. The responsibility fell on young Elliot who was 35. Fitz was 46. Richardson was 36. Wood and the patient were each 32. Cutler, who, seven weeks after this operation, did the first successful removal of an appendix prior to its perforation, was 47. The patient, Dr. Alfred Worcester, informs us that at his own earnest request Elliot did the operation in spite of the adverse opinion of the majority of the consultants.

Incidentally while trying to determine the part Dr. Elliot played in the early development of the surgery of the appendix, I have read most of the contemporary articles from 1886 to 1892. I regard this operation as the turning point of surgical opinion in the community in abandoning the old method of extraperitoneal approach, for laparotomy and direct search for the appendix.

Dr. Richardson's surgical opinions were also undoubtedly influenced by this case. His later contributions were anatomic and quantitative. The discussion concerning this case led him to investigate on the cadaver the best method of incision and the probable position in which one would find the appendix. He reported these in his first paper in the same number of the journal in which the above mentioned case was published by Dr. Elliot. With facile pencil and his deft fingers and engaging personality he spread the knowledge of the early symptoms and their proper treatment far and wide over New England, by repeated demonstrations and talks as he went about to operate. One might say he displayed what Fitz had reasoned, what Elliot, Cutler and Worcester had demonstrated, and what he himself had witnessed.

Dr. Elliot himself took little interest in matters of priority but he would have cared a great deal in any individual case if he had failed to do the rational thing for that patient, even if that particular thing had never before been tried. It was this which led him to operate on this case, and later led him to be among the first to remove an appendix in "the interval between attacks" on May 28th, 1890. Dr. C. B. Porter had done this operation for the first time in this community some six months before. Treves had priority in June, 1888.

In my opinion Dr. Elliot had the pronounced literary ability of clear expression of clear thinking. Besides his definite professional papers he sometimes took part in the discussions at medical meetings and his comments were always well expressed and often important although brief. The following is an extract from one of the early discussions on the surgery of the new disease appendicitis. Dr. Richardson and Dr. E. H. Bradford had recommended the extra peritoneal route to incise abscesses. Elliot said: "Exploratory laparotomy on the other hand is the surest way to find the trouble, and the most intelligent way to treat it. The chief objection to laparotomy is that it

occasionally involves unnecessary contamination of the peritoneum with foul pus. Now if by exploratory laparotomy an abscess is found which could best be drained extraperitoneally, this can still be done, and has been done under such circumstances. If the abscess is so situated that it cannot be drained without contaminating the peritoneum, then laparotomy is necessary. I think also that the danger of contaminating the peritoneum with pus has been greatly exaggerated." This whole discussion is worth reading, but Elliot's part rings like a bell. (*Boston Medical and Surgical Journal*, Jan. 26, 1888.)

Many other illustrations might be given of Elliot's ability to discern in their early stages ideas which were destined to take part in the progress of surgery. He followed Kelly's lead and did the fourth recorded case of nephroureterectomy. He was second only to Hegar in demonstrating the value of surgery in tuberculous peritonitis. His paper on extrauterine pregnancy in which he first called attention to waiting until the shock had subsided is a classic. He has priority and is always quoted in resection of the intestine for mesenteric thrombosis. He was among the first to operate for tumors of the spinal cord and in Feb. 1902 he divided posterior nerve roots for the relief of pain in inoperable cancer of the vertebrae. He first trusted the X-ray and removed a ureteral stone. He did the first successful laryngectomy that I know of in this community.

Since he was so early in each field he necessarily must have found it technically unexplored. To recognize the desirability of removing the appendix or of opening the hepatic duct is one mental step, but a second must be taken in conceiving the technical way to do this successfully without injury to the patient. That he possessed this faculty is shown by his invention of gauze sponges and of the ideal position for gallstone surgery and of his ingenious and successful method of maintaining the nutrition in cases of enterectomy by collecting the chyme in one opening and injecting it into the other. In his manner of meeting technical problems simplicity and directness were so pronounced that the absence of complexity concealed the originality. You will find no descriptions of complicated apparatus long since unused in Elliot's writings; on the contrary a simple description of the essential steps of each operation as it is still done.

The converse is also true. Nothing can be found in his papers which has proved to be a personal hobby, a fashional fad, an example of over enthusiasm, or an illustration of "meddlesome surgery". His was not an experimental temperament constantly trying new things. His primary idea was to benefit each case under his care and new ideas or methods had to convince him on that basis. I remember many of the cases that form the bases of each paper and know that his experiments were of this character, inventions to meet each particular problem for each patient. Since the experiments were successful he recorded them and they became part of surgical science.

I have alluded to his being a pioneer in brain surgery. He published nothing on this part of his work because he did not feel that he could add to what was already known. Although his interest in this field continued over ten years, few cases came under his care. He met Horsley in Europe in 1889 and although this young prophet of the practicability of brain surgery had as yet little standing in London, Elliot recognized his ability and came back to Boston keen to be his standard bearer in this country. He studied all that was then known about cerebral localization, aroused the interest of Dr. J. J. Putnam and the other Boston neurologists, maintaining that these hopeless cases were entitled to some sort of surgical effort even if the chances were greatly against success. Horsley had then operated upon about 40 cases and Keene, the pioneer in brain surgery in this country, had reported his first three cases the year before and one of these was decidedly successful. Unfortunately Elliot was still only an out-patient surgeon and had no opportunity to operate in the hospital unless when substituting for some of his seniors. It was not until 1893 that he had his first chance at the hospital to operate on a brain tumor and this, a cyst, was the first successful case operated on at the Massachusetts General, only one case having been trephined for tumor previously. Elliot, however, succeeded in calling attention to this branch of surgery among his associates. His intimacy with Horsley continued for many years and several times they exchanged visits. Superficially they were much alike with the same keen clear look and direct straightforward way of undertaking anything, but Elliot lacked the student qualities which Horsley possessed and had too much equanimity to be an insistent advocate of any idea. He was ready to recognize Horsley's vision but not to submerge all his energy to prove it to others as some great pupils have done for their masters. He was satisfied to admire his friend without attempting to imitate him. All he succeeded in doing was to arouse interest in this branch of surgery among his colleagues who each insisted on doing a few cases without proper study, with the result that none of them became really competent. However, this was the custom of those days.

The best that can be said of brain surgery at the Massachusetts General Hospital is that the evident lack of success may have inspired Dr. Harvey Cushing who was in Elliot's service in 1894 and 1895 to make this problem his life work. Elliot's enthusiasm for Horsley was catching. He would have been glad to do all the cases of brain and spine lesions which were referred to the clinic until this branch of sur-

gery passed the experimental stage, but the same spirit which prevented Homans from doing laparotomies at the Hospital persisted, and Elliot could only do his share during his four months of service. Even in 1905 when I had occasion to review the brain cases which had been operated on at the hospital and had intensively studied the records of every case, the same spirit prevailed. The staff still continued to perform their individual experiments and would not permit one of their number to have all the material in return for the necessary study involved in perfecting himself in the neurology and special technique. As 63 cases in ten years had to be divided among some 18 surgeons progress was of course not made. Meantime Johns Hopkins had appreciated Cushing's enthusiasm and had offered him full opportunity. It was not many years before Cushing's genius for detail made Horsley's prophetic ideas of practical importance to the patient with a brain tumor. So Elliot wrote nothing on this subject except one excellent paper on traumatic cranial surgery, but he did act as a successful local pioneer and in my opinion interested Cushing in his life work.

Dr. Elliot accomplished most of his work while he was still Out-Patient Surgeon before he was forty-two when he received his appointment to the staff of the hospital. He resigned at the age of fifty-four, which was a misfortune, for he was in the prime of life, and his foresight, judgment and straightforward honesty, together with his great ability, would have been of inestimable benefit to the hospital. However, his energy and judgment were not wasted, for the Society for Prevention of Tuberculosis and the New England Surgical Dressings Committee during the great war had the benefit of it, as well as various business interests of which he was on the directing boards.

In writing this sketch of Dr. Elliot's work I have not lost sight of the fact that he was born and lived at just the right time to take part in the development of modern surgery. The work of Pasteur, Lister and of Morton made it possible for the young man of his generation to do as he did, and there were other contemporaries in the other large American cities, who, with the same advantages made step by step the same progress along the same lines. Dr. Elliot was no genius, merely an honest intelligent young man with normal mind, physique, and aspirations. The group of colleagues with whom he worked at the hospital helped form his opinions and his character. To have worked with Porter, Homans, Warren, Arthur Cabot, Richardson, Harrington and Mixter was in itself a strong stimulus. These other young men had also profited by the sound teaching of Dr. H. J. Bigelow and Dr. Samuel Cabot in the principles of the old surgery which was giving way to the new solely in the possibilities developed from the germ theory of infection, thus enabling them to reason out the proper steps to exclude germs from wounds. Their knowledge of the behavior and treatment of septic wounds would be impossible for this generation to acquire. To have made a choice for leadership among the men of this unusually able group would have been most difficult.

All of these men showed us a fine spirit of service and to each we are indebted for something of what we are. In contrasting their service with that given by Elliot to the community and to the world I am far from asserting relative values. In some degree each was an originator or a promoter of some new surgical idea as in some degree they were all demonstrators and teachers of known surgical truths. While Elliot had independent judgment he was willing to adopt anything which he considered of value in the work of others; I wish to express my feeling that he used his mind so well that he was always a little in advance of those about him and seldom needed their help.

It is perhaps a matter of personal taste that service such as Elliot's appeals to me. I contend that from the time he was a medical student he quietly, modestly and yet firmly showed a better way to his teachers, to his colleagues and to his assistants. They followed him without knowing that they were being led. He was an instinctive pilot who could carry the ship up an unknown channel because of his clear vision and judicious combination of boldness and caution. He was no foolhardy adventurer with bits of geography named after him as the first discoverer, but one who carefully examined the evidence for the existence of new bays or islands in case he might need to pilot someone to them. I feel sure that the surgeons who did the first operations for appendicitis or gallstones studied the possibilities of the local landmarks, the alternatives of approach and the means of preventing infection more thoroughly than modern surgeons. I believe those early patients were almost as safe in their hands even then, as they would be now in the hands of modern pilots who follow charted tracks into the harbors. The names of the early skippers who used the best channels and who knew every ripple and tide will be forgotten, just as those of the surgeons who did the first operations which we still use. Many operations which we do as routine today were done by them successfully when few or none had been done in this community.

Much that we have learned since, had to be reached by trial and error. The remarkable thing is that as a pioneer Dr. Elliot seemed to sense the right way and avoid mistakes. His mind cut as directly through frills and unessential details as his knife through unimportant anatomic structures to the tissue he sought to repair or remove. He was not a teacher of detailed anatomy but he knew well the essential anatomic landmarks. He held that the way to dissect, especially for malignant conditions, was

to locate what must not be removed and then to excise everything else in the neighborhood of the lesion. In this he was in great contrast to his colleagues Richardson and Mixter, who were teachers of anatomy and who could name every branch of every artery or nerve and whose operations were a delight to watch as they developed and located each little structure. I could never agree with Dr. Elliot on this dictum for I believe that no matter how detailed one's knowledge in any branch of medicine, there will be times when the detail will be of use. Far from making one timid such knowledge of minute anatomy gives confidence and not infrequently will enable the surgeon to recognize the neighborhood of important structures which are distorted from their normal relations by pathologic changes. However, this theory of his was something he liked to talk of, rather than one which actually led to errors, for he really knew anatomy well.

Dr. Elliot's early retirement from active practice spared him that trying period for both surgeons and their assistants when eyesight is dimming, when memory requires prompting and when the hand lags in pace and must be slowed or show a tremble. His remembrances of assisting his seniors at this stage of their careers would have haunted him had he been obliged to continue his work. His life after the close of the war and of his activities as chairman of the New England Dressings Committee, was his own. He enjoyed his family and friends and shared with his wife their continued pleasure in walking and riding about their home in Needham. He rode regularly to hounds with the Norfolk Hunt up to 1924, the year before his death. He never lost his appearance of poise, self-control and reserved force, and his friendly smile and interested greeting at social events reflected the pleasure he had in seeing his old patients and pupils who were invariably glad to see him.

Dr. Elliot died of heart disease at his home on Sept. 17th, 1925, and Mrs. Elliot survived him less than a year. While they had their share of sorrow, they had enjoyed the beautiful things of life, always preferring the simple universally obtainable pleasures as the glory of the dawn in summer or the comfort of a glowing hearth after a walk in the winter twilight. Yet they appreciated as few people can the finer things in music, literature, art and social intercourse, which require the discipline of training and earnest study.

I have tried to show Dr. Elliot as I saw him, and looking at the fine face in the accompanying picture, I like to think of future students who are coming and hope that they may know of his straightforward career and useful, happy life and not be discouraged when they find they are not supermen. They will have the same opportunity to be temperate in everything, to aim at excellence rather than superiority, to be eager to abandon old prejudices and to see and to adopt better methods to relieve their patients. They will need no superhuman qualities of mind or body if they use to their best advantage the gifts common to every normal man. Dr. Elliot's career was an example of the correct use of normal faculties rather than an exhibition of superior intellect or of excessive industry.

VERMONT STATE MEDICAL SOCIETY

USE AND ABUSE OF RADIUM*

BY ERNEST M. DALAND, M.D., F.A.C.S.†

RADIUM is a metal found in uranium ores in the form of radium sulphate and radium chloride. Radium itself has no therapeutic value but its value lies in the substances into which it changes. Radium gives off a gas, radium emanation or radon. This has no therapeutic value but this changes again into Radium A, then Ra B, Ra C, etc. These are the substances which do have value as these give off radiation which has a marked effect on certain tissues. There are three types of radiation,—alpha, beta, and gamma. Alpha radiation will not penetrate a piece of glass or a thick piece of paper. The beta rays are stronger and pass through glass for a distance of several centimeters of air but a less distance through tissues. These are more caustic in their effect and cause necrosis of tissue. If a piece of lead or other heavy metal is placed over the tube, certain of the shorter and more caustic rays are filtered out, leaving the longer and less caustic ones. The gamma rays are much more penetrating and extend for several feet through the air. These more closely resemble the rays from a high voltage X-ray machine. They are called into use when deeper penetration of the tissues is desired or when it is desired not to injure the skin.

There are two general methods for using radium. If some of the metallic salt is placed in a tube or placed on a placque, the decomposition products of the radium are kept within the walls of the tube or placque and the rays pass outward. However, it has been found possible to collect the emanation or gas by putting the salt in solution and pumping the gas given off into small glass tubes. This allows the solution, which contains the costly radium, to be kept intact in a safe. This emanation is then used in the glass tubes. For the time being it is just as effective as the original radium and it can be used on patients without fear of loss, for the monetary value is very small. It is known that these tubes of emanation lose one-sixth of their strength each day. As tubes are collected daily, there is a constant amount of emanation on hand, in spite of the decay.

You have all heard of radium seeds. These are very tiny glass capsules, containing a trivial amount of emanation. These seeds are injected into growths and allowed to stay permanently. They cause necrosis of the tumor for a distance of one to two centimeters around the seed. The disadvantage in these lies in the amount of necrosis and resulting pain experienced by their use. Recently gold and platinum have been used in place of glass. The metal screens the more caustic rays, with the result that the pain resulting is very much diminished and the effect equally good as when glass was used.

Now I wish to review some of the uses of radium. In the non-malignant class of diseases its chief use is in angiomas of the cavernous type, less satisfactorily in the port wine marks, in the treatment of keloids, and skin keratoses. In some small bleeding fibroids and in uterine bleeding of undetermined cause it is fairly effective. Care must be taken that an artificial menopause is not brought on or the patient must be told that this may happen.

Application of large quantities over the spleen in myelogenous leukemia or over the glands in lymphatic leukemia and Hodgkins' disease is very effective for a time, but the enlargements reappear and are affected less each time the treatment is given. The X-ray in competent hands is probably as effective as radium in this group of cases.

In malignant diseases radium is not as certain and as quick as surgery and should not be used if surgical measures are possible. The desire in treating cancer is to destroy or remove the whole growth. Surgery cannot always do this. If radium is used it should be so used that all parts of the lesion shall receive a destructive dose. If that cannot be done the patient cannot be cured. It does no good to destroy the surface of a growth, if the base is to continue its growth in the meantime.

Radium is very effective in treating skin cancer where surgical removal would cause too much deformity as on the nose or eyelids.

It is dangerous to treat cancer of the lip with radium unless some notice is taken of the glands. This is true of any metastasizing tumor. Probably twenty times a year I see people returning one to five years after treatment of cancer of the lip with radium with inoperable glandular metastases. Surgical removal of the lip lesion with the glands draining the region is the method of choice.

In the treatment of cancer of the tongue and buccal mucosa, surgery is first, surgery and radium second, and radium alone third in order of efficiency.

I can see no place for radium in cancer of the breast except for the treatment of recurrent skin nodules. In cancer of the antrum and accessory sinuses operation combined with radium is the accepted treatment.

Radium has little effect on cancer of the gastro-intestinal tract except in inoperable cancer

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†For record and address of author see "This Week's Issue," page 1013.

of the rectum where it has good palliative value. It is usually necessary to do a primary colostomy if the maximum radiation is to be given.

It is probable that radium treatment is now the best means of handling cancer of the cervix uteri, either as curative or palliative. The early case where the cervix alone is involved and where a complete hysterectomy with dissection of the pelvic glands is possible is hard to find. It is necessary to apply the radiation in the uterine canal as well as in the cervical growth. The more favorable the case the greater the amount of radium that should be used. In late cases small amounts of radium will diminish the pain and stop the bleeding.

In cancer of the fundus supravaginal hysterectomy is the best therapy but radium offers palliation. Cancer of the prostate and bladder are occasionally helped by radium in connection with operation.

Radium is not the magic material that it was hoped it was to be when it was first discovered. Much harm has been done by its use in the wrong type of case. One of the dangers at the present time is in its use by untrained men. It is possible to obtain radium seeds or tubes by mail with directions for its use. Recently I saw a case where a physician had planted a seed in a growth at the inner canthus. Three weeks later when the reaction was very violent, he admitted to the patient he knew nothing about radium and that he had better go to a radium hospital.

It is unfortunate that radium costs so much money. Where a private supply is owned, it is necessary to charge large fees, particularly where the radium is not used twenty-four hours a day. Certain men become known as extortionists whether or not they are such. This difficulty can be overcome somewhat by the ownership of the radium by groups of men or by hospitals, with a proper check on the uses to which it is to be put and the charges to be made.

Finally I wish to sound another warning against the use of radium in tumors of the metastasizing type unless the glands are properly treated or in cases where surgical removal is possible.

MISCELLANY

BENNINGTON COUNTY MEDICAL SOCIETY NOTES

The Bennington County Medical Society held its regular meeting May 23d, 1928, at the Putnam Memorial Hospital. Henry S. Goodall, M.D., presented a fine paper on "Essentials of Diagnosis and Treatment in Pulmonary Tuberculosis." Dr. Goodall was formerly connected with the sanatorium at Saranac, N. Y.

Dr. Tobin reported an interesting case of frontal sinus disease complicated by marked dyspnoea and exophthalmus.

The society reaffirmed its determination to work for the passage of a proper medical practice act, the present act being somewhat obsolete and not in keeping with conditions as they exist today.

John Simpson Niles, M.D., aged 81 years, for many years a practitioner at Pownal, Vermont, died at his home there May 17th. He was graduated from the medical school of University of Syracuse.

JOHN D. LANE, M.D., *Secretary.*

DEPARTMENT OF PUBLIC HEALTH REPORT FOR MAY, 1928

The following cases of communicable diseases have been reported during the month: chickenpox 107, measles 228, mumps 79, scarlet fever 47, smallpox 1, tuberculosis 17, whooping cough 46.

At the Laboratory of Hygiene the following examinations were made:

Examinations for diphtheria bacilli	68
" " Widal reaction of typhoid fever	34
" " malarial parasites	1
" " tubercle bacilli	165
" " evidence of syphilis	306
" " gonococci in pus	88
" of blood for contagious abortion in cattle	51
" " blood for white diarrhea of fowls	108
" " water, chemical and bacteriological	51
" " water, bacteriological	105
" " milk, market	144
" " milk submitted for chemical only	7
" " milk submitted for microscopical only	8
" " milk submitted by Dept. of Agriculture for added water	4
" " foods	27
" for the courts, autopsies	3
" " the courts miscellaneous	33
Autopsies to complete death returns	2
Miscellaneous examinations	50

Reports from the Division of Communicable Diseases are as follows:

Cases of gonorrhea reported	25
" " syphilis reported	57
" " gonorrhea reporting for treatment	0
" " syphilis reporting for treatment	13
" " intravenous treatment	13
Total treatments	36
Gonorrhea outfits distributed	192
Wassermann outfits distributed	288

The Division of Aftercare for Poliomyelitis reports 229 patients seen, 16 home visits made, 8 new pieces of apparatus fitted, 13 pieces of apparatus altered or mended and 4 plaster casts removed. Seven patients returned home from the Fenway Hospital and two from the Children's Hospital. The usual spring clinics were held in nine towns. Sales from articles made under the direction of the vocational teacher amounted $23.40.

In the Division of Maternity and Infancy, the nurse visited 10 towns at the invitation of various women's clubs, farm bureaus and Parent-Teachers Association.

The Division of Tuberculosis visited all of the Teacher Training classes in the state with the ex-

ception of Montpelier and Barre and explained the methods of health education.

DEATHS

DR. GEORGE P. COLLINS

Ferrisburg recently lost her most aged physician, Dr. George P. Collins, in his eighty-fourth year.

He was for more than fifty-six years a prominent physician and citizen of this section, a graduate of Middlebury College and of the Medical Department of the University of Vermont.

One brother survives him, D. W. Collins, of Burlington.

The funeral services were held from his late home in Ferrisburg.

DR. ANTONIO F. ELIE

Dr. Antonio F. Elie of Island Pond, Vermont, died after a lingering illness at the St. Vincent de Paul Hospital in Sherbrooke, Quebec, on March 28th, 1928, at the age of 68 years.

He was born at Labaie, Quebec, on May 21st, 1859. His ancestors came originally from Brittany, France.

At the age of 22 he left Nicolet College and entered Victoria Medical College, graduating in 1886.

He came to Island Pond, Vermont, one month later, and remained there in active practice for about 42 years.

Dr. Elie was in every way a perfect type of the old-fashioned family doctor, whose professional activities had taken him into the hearts and homes of practically everybody in the town and vicinity in which he lived and labored so long.

He was a kind and genial man and was greatly esteemed by all who knew him.

He is survived by his wife, two daughters, Mrs. A. J. Paquette and Miss Marie Stella Elie, and two sons, Armand J. and Lionel A. Elie.

DR. JOHN SIMPSON MILES

Dr. John Simpson Miles died suddenly in his office at Pownal, Vermont, May 17, 1928, while treating a patient.

He was born at Petersburg, New York, April 17, 1847, and received his medical education at the University of Syracuse. New York. Fraternally he was a Mason.

DR. ANSEL I. MILLER

Dr. Ansel I. Miller, 70, for more than 40 years a practising physician in Brattleboro, deacon of the Centre Congregational Church and former member of the school board, died June 15 of heart and kidney trouble following pneumonia.

Last March Dr. Miller was taken ill in Washington. He returned to Springfield, Mass., and was ill for a time with pneumonia. He was able to return to Brattleboro the last of April.

Dr. Miller was born in Dummerston, October 14, 1857, of Joseph and Sophia (Arms) Miller. He came of Revolutionary stock and his ancestors were among the first settlers in Dummerston.

He attended the common schools and Brattleboro Academy at West Brattleboro, graduating in 1876, and then entered Williams College at Williamstown, Mass., where he graduated with the degree of Bachelor of Arts in 1881. In 1884 he graduated from the College of Physicians and Surgeons, New York.

For 18 months after his graduation at the College of Physicians and Surgeons Dr. Miller was interne at the City Hospital (Charity) and the Maternity Hospital, New York.

On December 23, 1885, Dr. Miller married Miss Isabel Boynton in West Stockbridge, Mass., and December 30 they came to Brattleboro, Dr. Miller opening an office here for the practice of his profession. He became one of the most successful and widely known physicians in this section.

He became affiliated with various medical societies, local, state, and national, including the Windham County Medical Association, the Connecticut River Medical Society, the Vermont State Medical Society, the American Medical Association, and the New York Academy of Medicine. He also belonged to the Doctors' Club of Brattleboro and the Society of the Alumni of the City Hospital, New York. On May 5, 1914, he was elected president of the Windham County Medical Association, which he previously had served as vice-president. He had been examiner for various life insurance companies.

He had served on the advisory board of the Brattleboro Memorial Hospital and had been on the active staff ever since the hospital was established. He also taught in the nurses' training school and as Trustee of the Austine Institution, the state school for the deaf at Brattleboro.

Besides his wife, Dr. Miller leaves a son, Wells B. Miller of Baltimore, Md., and a brother, Adin F. Miller, town clerk of Dummerston.

Throughout his many years as a physician Dr. Miller kept in touch with the progress of the science of medicine through attendance at conventions and through constant reading. He was devoted to his profession, making many close personal friendships through his fine character and personality and his deep interest in his patients.

Case Records of the Massachusetts General Hospital

ANTE-MORTEM AND POST-MORTEM RECORDS AS USED IN WEEKLY CLINICO-PATHOLOGICAL EXERCISES

EDITED BY R. C. CABOT, M.D.

F. M. PAINTER, A.B., ASSISTANT EDITOR

CASE 14191

COMA

MEDICAL DEPARTMENT

An unmarried Irish-American woman sixty-seven years old entered the hospital March 17 in coma. The history is limited to a few facts obtained from a brother who did not live with her and from a nurse who brought her in.

For a year or more she had had attacks of dyspnea on exertion and her activity had been limited more or less. A week before admission she became rather suddenly ill with what seemed to be a respiratory infection. She had been in bed. The day before admission she seemed better. The day of admission she became very much worse. Halfway to the hospital she went into coma. There was no definite knowledge of medication except that her doctor gave her two pills containing digitalis early the evening of admission, and that before starting for the hospital she was given a quarter grain of morphia.

Clinical examination showed a woman obviously moribund lying propped up, comatose, breathing with great difficulty. Only a very cursory examination was done. Face and hands intensely cyanotic. Hands clammy. Profuse perspiration. Lungs examined only superficially over the front. In the upper right chest to the level of the fourth rib dullness, bronchovesicular breathing and many moist râles. Apex impulse of the heart not seen or felt. Left border of dullness 11 centimeters to the left of midsternum; fairly marked enlargement to the left. Rate rapid. Action regular. Sounds of fair quality, not muffled. At the apex a to-and-fro murmur, apparently a rub. Sounds at the base obscured by respiration. Pulses weak and thready. Artery walls not palpable. Blood pressure 100/60 to 180/100. Abdomen large, soft, tympanitic. Questionable liver edge palpable. (Nothing felt but a vague resistance.) Extremities cold. No edema. Pupils and knee-jerks normal.

No laboratory work was done.

Temperature 104.9°, rectal. Pulse 140. Respirations 40.

The patient was given caffein and adrenalin and propped up with her head high. Her color became better and her hands and feet warm. At ten o'clock in the evening she was given three grains of digifolin intramuscularly. This was repeated at 11 p. m. and at midnight. Her pulse slowed slightly and became stronger, and she seemed to recognize her brother. Caffein was repeated at 11 p.m. and 1 a.m. The blood pressure fell slightly and the pulse came down to 120 at one o'clock. A little over an hour later her respirations suddenly stopped. Her heart continued to beat for a few moments.

DISCUSSION

BY RICHARD C. CABOT, M.D.

NOTES ON THE HISTORY AND CLINICAL EXAMINATION

We can safely say that neither the digitalis nor the morphia could have caused her condition.

The superficial examination of the lungs showed good judgment.

The to-and-fro murmur tells us why they said the sounds were not muffled. They were thinking about pericardial effusion.

That is an extraordinary swing in blood pressure.

DIFFERENTIAL DIAGNOSIS

I do not see anything to consider except pneumonia in a person who is likely to have also a hypertensive type of heart trouble.

The thing that I want to emphasize chiefly about this case is how not to treat a pneumonia, namely to move the patient around. I had this borne in on me, as many of us had, in France. The effect of moving pneumonic patients was that they almost all died. Moving pneumonics is the very worst thing to do. You can move typhoids perfectly well, but pneumonics do much better lying still where they are, even under poor conditions, than after being moved. Even moving a pneumonic patient around in bed does harm. A neighbor of ours in the country had pneumonia. An eminent consultant was called from Boston. He felt of course that he should make a thorough examination. He sat the patient up and did all sorts of things. In two hours the patient was dead. I think it is very important to realize this. Be thorough in your physical examination. But when you know perfectly well from other evidence that a patient has pneumonia it does not make the slightest possible difference how marked or which side the physical signs are. Then physical examination harms the patient.

Perhaps I am wrong. This patient may not have pneumonia. But I do not see what else she has if she has not that. The pericarditis which she has is not enough to kill her. It is a common complication of pneumonia, but I do not feel at all sure about its presence here. So I should say that she is going to have hypertrophy and dilatation of the heart, a pneumonia, I suppose on the right, and I do not know what else.

Ought we to consider tuberculosis here? Noth-

ing is said about emaciation. She does not seem to have had cough any length of time. There is no reason to suspect tuberculosis except for the râles. They are perfectly proper to hear over a pneumonia.

MISS PAINTER: She is recorded as well nourished.

DR. CABOT: Should we consider a pulmonary infarct here? I think not. There is nothing here to make us consider it except this pulmonary lesion. So I shall stick to my original guess of pneumonia with hypertrophy and dilatation of the heart and with no evidence of anything else except possibly pericarditis.

A STUDENT: Do you find coma due to a pneumonic process in itself?

DR. CABOT: Yes, especially in old people. It is very common in them.

A STUDENT: What else could that to-and-fro murmur be?

DR. CABOT: They were thinking of the possibility of acute endocarditis. That might give a to-and-fro murmur. I do not know how to rule it out.

A STUDENT: Was the right border of dullness ascertained?

MISS PAINTER: It was not.

DR. CABOT: It is difficult with a right sided pneumonia to find that out.

CLINICAL DIAGNOSIS (FROM HOSPITAL RECORD)

Lobar pneumonia.
Arteriosclerotic heart disease.

DR. RICHARD C. CABOT'S DIAGNOSIS

Hypertrophy and dilatation of the heart.
Pneumonia, probably on the right.

ANATOMIC DIAGNOSES

1. *Primary disease.*

Arteriosclerotic heart disease. Aortic stenosis.
Generalized arteriosclerosis.

2. *Secondary or terminal lesions.*

Focal necrosis of liver.
Focal necrosis of spleen.

DR. TRACY B. MALLORY: This case seems to have been entirely one of arteriosclerosis. The to-and-fro murmur was undoubtedly caused by a marked degree of aortic stenosis which apparently was purely arteriosclerotic in origin. There was no evidence of any rheumatic disease of the heart whatever. There was very marked passive congestion of the lungs, a moderate degree of the spleen, liver and kidneys, and the kidneys showed also a considerable degree of arteriosclerotic nephritis. The head was not examined, so I do not know the cause of the coma.

DR. CABOT: Or of her temperature?

DR. MALLORY: No.

DR. CABOT: Were the lungs all right?

DR. MALLORY: Yes.

CASE 14192

A PERSISTENT BULLOUS ERUPTION

DERMATOLOGICAL DEPARTMENT

An American widow seventy-six years old entered the Skin Ward on October 18. The complaint was a generalized itching eruption.

Her first skin trouble was forty years before this time, when large blisters broke out on her arms and legs, a few on the face and some inside the nostrils; none in the mouth. She was seen at that time by Dr. J. C. White, who after observing the condition for some time made a definite diagnosis of pemphigus. She entered the Homeopathic Hospital, where she remained three months. She was treated with cocoa butter. Her skin cleared up in about a year and she remained well for twenty-three years. Then the skin broke out again in a similar manner. The lesions in this attack were confined to the legs. She was treated by Dr. John T. Bowen, who also made a diagnosis of pemphigus. The treatment consisted of drying washes. The eruption cleared entirely in a few months.

The present attack had its onset five months before entrance into the hospital. It began with blisters which first appeared on the scalp after a vigorous brushing. From the scalp the eruption spread to the forehead, cheeks, chest, neck, back and legs, with a few lesions on the abdomen. She also had lesions in the mouth. The lesions were blisters, but smaller than in the previous attacks, only a few reaching the size of a five-cent piece. Extreme itching was present in all the attacks.

Her past history reveals that besides her skin trouble she had had whooping cough and dysentery in childhood, occasional bad colds, ruptured appendix six years before admission, with operation and uneventful recovery. She had never had scarlet fever, diphtheria, influenza, malaria or any other illness. She was married soon after the Civil War and had three children, all of whom were now living. Several years ago she had all her teeth extracted on account of pyorrhea. Six months ago she fell, dislocating her left shoulder. She had a good appetite and drank a great deal of water. She had been troubled considerably with gas in the stomach. Her bowels were "unruly", usually either too loose or constipated. She had had piles for many years, with occasional bleeding, never severe. She had never had jaundice. She had urinated two or three times at night for some years. She passed the menopause twenty-six years before admission. She had had no flowing or discharge of any kind since.

Medical examination in brief showed an elderly lady lying comfortably in bed. Over the skin of the neck, chest, back and legs were many isolated and grouped vesicles and bullae, together with crusting lesions. Most of these lesions were definitely grouped. The largest lesions were about one centimeter in diameter. The majority

of the lesions were vesicles. There were two lesions in the mouth, whitish areas which looked like collapsed vesicles. The bullae arose from clear skin.

Heart sounds of poor quality. Frequent extrasystoles. Radials barely palpable. Blood pressure 150/110. Lungs showed diminished resonance at both apices, with bronchovesicular breathing. Abdomen protuberant. Deep tenderness in right upper quadrant. Linear operation scar in right lower quadrant associated with some diastasis of the muscles, which ballooned out on coughing. Hemorrhoidal tabs about the anus, with some internal hemorrhoids.

The urine showed a faint trace of albumin with hyalin casts at one examination. At all other examinations the urine was negative. Shortly after entrance blood examination showed hemoglobin 90 per cent., with the following differential white cell count: polymorphonuclears 68 per cent., lymphocytes 19 per cent., large mononuclears 7 per cent., eosinophiles 6 per cent.

At times during November she had attacks of extreme weakness. She was seen by Dr. Paul D. White in consultation; his opinion was that she had an arteriosclerotic heart with premature beats, and that perhaps paroxysmal fibrillation or tachycardia might account for the fainting attacks. He suggested six grains of quinidine a day. This was given and she had no more attacks of weakness for two months.

Internal medication for her skin disease consisted of Fowler's solution three drops three times a day after meals, gradually increased to six drops three times a day.

During January, 1925, she failed considerably, the ankles became somewhat swollen and she had considerable dyspnea, relieved somewhat by digitalis. Fowler's solution was omitted. Her blood at this time showed a severe anemia as well as a remarkable leukopenia, hemoglobin 50 per cent., red cells 2,100,000, leukocytes 1400 to 1800, polymorphonuclears 66 per cent., lymphocytes 27 per cent., eosinophils 4 per cent., undetermined 3 per cent. On account of the severe anemia blood transfusion was considered, but was not indicated in the opinion of the medical consultant.

During most of her stay in the hospital new lesions appeared daily, varying in number from one to eight. On February 20 she was discharged unrelieved.

She died on April 14, two months later.

Discussion

BY E. LAWRENCE OLIVER, M.D.

The most striking feature of this case is the vesicobullous eruption over a considerable part of the body. Many of the lesions are rather definitely grouped. There are lesions in the mouth. She had had two previous similar attacks, one forty years ago, one seventeen years ago, both diagnosed as pemphigus by eminent dermatologists.

In the differential diagnosis we may consider pemphigus vulgaris, dermatitis herpetiformis, epidermolysis bullosa, erythema multiforme bullosum.

There are three principal varieties of pemphigus, pemphigus vulgaris, pemphigus foliaceus, pemphigus vegetans. Pemphigus vulgaris, as the name implies, is the commonest type. In this type the lesions consist of bullae, usually developing rapidly without preliminary erythema or areolae. These bullae vary from the size of a pea to that of an egg, and many coalesce to form large lesions of irregular outline. These bullae may rupture in a few hours or days, leaving a moist red surface which heals in a week or two. The eruption may appear on any part of the body, including the mucous membranes, to which in rare cases it may be limited. Mucous membrane lesions usually indicate a severe form of the disease. The subjective symptoms are burning pain or itching. One or all may be present. Constitutional symptoms are often absent even in extensive cases, but in old persons there is apt to be considerable prostration.

Pemphigus foliaceus differs from the above in that the sites of the bullae do not properly heal. Cornification being imperfect, a moist red area remains. Exfoliation is abundant and the decomposition of the cells of the moist surface gives rise to a nauseating odor. The skin often becomes universally involved and the patients gradually lose weight and die from exhaustion or some intercurrent disease.

Pemphigus vegetans is a very rare type in which papillomatous vegetations develop on the moist surfaces left by the broken down bullae. These vegetations occur as a rule in those areas where heat and moisture are present, as about the arms and genitals, the inguinal folds. There are also apt to be severe lesions in the mouth.

Dermatitis herpetiformis is still considered by some authorities to be the same disease as pemphigus. Most dermatologists however believe it to be a distinct entity. This case certainly has features strongly suggesting dermatitis herpetiformis. The grouping as well as the small size of the lesions and the severe itching are more suggestive of dermatitis herpetiformis than they are of pemphigus. The lesions in the mouth however are strong evidence in favor of pemphigus, as the mucous membrane is rarely if ever involved in dermatitis herpetiformis. The vesicles in dermatitis herpetiformis usually arise from an inflamed base. It is admitted that in some cases it is impossible to differentiate between these two diseases.

Epidermolysis bullosa is a rare congenital disease, usually hereditary, which manifests itself by the formation of bullae which occur following slight trauma. The bullae in this disease therefore usually occur on points subject to

trauma or pressure, as the fingers, elbows, knees, buttocks. Lesions also often occur on the tongue and vocal cords. The lesions often leave scars. In erythema multiforme bullosum the bullae are only a part of the eruption, as they are mixed with areas of erythema. The bullae also arise as a rule from inflammatory areas of redness and not as in pemphigus from clear skin. Erythema bullosum usually runs a short course of a few weeks only.

The case under discussion seems quite certainly a case of pemphigus vulgaris. The bullae arising from sound skin, the mucous membrane lesions, the previous attacks diagnosed as pemphigus are all in favor of this diagnosis.

A new method of diagnosing pemphigus has recently been described by Pels in a paper read before the American Dermatological Association at Washington, D. C., in May 1928. Pels worked along the lines of Macht, who has shown that the blood of menstruating women and the blood of pernicious anemia have a retarding effect on the rootlets of certain seedlings. Pels experimented with the blood of patients suffering from various skin diseases. Mixing the blood serum with equal parts of the culture medium on which the seed was to be planted, he found that of all the usual skin diseases pemphigus was the only one in which the blood serum had a definite retarding effect on the growth of the seedling rootlets of Lupinus albus. Curiously enough the serum of scarlet fever patients had a stimulating effect on the rootlet growth.

The cause of pemphigus is still unknown.

The prognosis of pemphigus should always be guarded. The skin may clear up as it did in the first two attacks in this case, but the disease is very apt to recur. The intervals in this case were of extraordinarily long duration. In children the prospect is much better than in adults. Cases having mucous membrane lesions usually do not recover from the disease. In some cases of pemphigus the disease may be active for years without seriously undermining the general health even though most of the skin of the body be involved. The disease seems to be particularly fatal when it occurs in Jewish women.

In the treatment of pemphigus both local and constitutional treatment is indicated. It is generally agreed that arsenic is the most valuable drug, though some deny its worth. It may be given as Fowler's solution, as Asiatic pills, or as suggested by Davis of St. Louis, as iron cacodylate intravenously. He gives one grain three times a week and on alternate days 1.5 cubic centimeters of coagulin subcutaneously.

Externally, applications of a soothing nature, washes, powders, or ointments, may be used. It is best to use whatever the patient finds most comforting, for it is improbable that external applications have any effect on the disease.

DIAGNOSIS

Pemphigus vulgaris.

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A WORD OF CAUTION

THE Public Health Committee of the Massachusetts Medical Society has been doing a valuable piece of work in the last year or so in attempting to determine the merits and demerits of various types of apparatus which are being used for the purpose of insolation or ultraviolet therapy. Much of its investigation has concerned the various types of mercury vapor quartz lamps; it has also caused to be published the results of the Bureau of Standards in testing the efficacy of the well known ultraviolet transparent window glasses which are now on the market.

The mercury vapor quartz lamp is unquestionably a source of powerful ultraviolet emanations; it is also true that in the course of time the tubes in these lamps will deteriorate to such an extent that they are no longer of value for the purpose for which they were intended. When functioning efficiently, on the other hand, these lamps are real and potential sources of danger. The powerful ultraviolet rays must be employed with care or serious burns, comparable in their nature to those produced by sunlight will result, and following a much shorter time of exposure than sunlight requires. It has been brought out, furthermore, that it is possible that other and more dangerous rays, resembling those emanating from the roentgen ray tube may be produced, and with these a definite, far reaching health hazard may be associated.

The most important results of studies with commercial window glasses which admit the ultraviolet ray has been that certain ones are of little value for this purpose when new, and that others deteriorate so rapidly that they are of practically no value in a year's time. Those which have stood the test of prolonged experimentation are the original and costly quartz glass, and the more practical product of the Corning Glass Company.

The value of pure sunlight in promoting health and in the prevention and treatment of rickets and tuberculosis has long been well known. Recently, however, this knowledge has been the subject of the usual intensive propaganda, to such an extent that we are liable to be converted into a race of sun worshippers. The sun bath is being changed from a valuable therapeutic measure to a universal fad, and the manufacturers of children's clothing are turning this passion for nakedness to their own advantage by devising and selling at a profit clothes which do not clothe—the popular "sun suit".

The "sun suit" is all very well for those who wish to give their children sun baths and follow a new style in clothing at the same time. Our objection to this sartorial fad is that as a result of it numerous children, during the approaching summer, will be broiled to a lobster red, blistered and burned to a crisp by ignorant guardians who have more respect for a stern decree of fashion than they have for the power of a July sun.

The ultraviolet end of the spectrum is as valuable as it is fashionable, but it deserves to be treated with respect in the three coming months. Nature knows how much her children can stand, and has appropriately pigmented those who are destined to walk, naked and unashamed, in the heat of the noonday sun.

DR. JOHN WHEELOCK ELLIOT

IT is a pleasure and privilege to publish in this issue of the JOURNAL an Obituary of John Wheelock Elliot by Dr. E. A. Codman. This record is more than an ordinary obituary because it sets forth much of interest pertaining to the progress of surgery in which Dr. Elliot played an important part.

The older men in the profession will enjoy reviewing the important features of the life of one who was known to them as Jack Elliot and students of local surgical history will find a record of his inspiring personality. Probably no one among his confreres knew Dr. Elliot better than did Dr. Codman and the author of this obituary has taken pains to portray the im-

portant characteristics of this lovable gentleman in an entertaining manner.

This record should stimulate the friends of those who are participating in the endless procession towards the unknown to record the important details of the lives of those who have contributed to the progress of medicine.

YEAST FAILS TO RISE TO THE OCCASION

THE United States Public Health Service has again taken up the cudgels of science as against rank commercialism and has made an investigation of the food and medicinal qualities of yeast. The results are as might be expected. Yeast can furnish a part of the protein requirements of the body but they can be furnished more palatably and cheaply in other foods. Yeast is rich in vitamin B, but is less palatable and more costly than many other foods which contain the necessary food factor or factors supplied by yeast. Yeast is mildly laxative, hence its heralded value in skin disease and constipation. It has not been shown, however, the investigation contends, that it is more valuable in this connection than some of our well known green vegetables and fruits.

The consternation, confusion and wailing and gnashing of teeth in the Fleischmann camp can only be imagined.

THIS WEEK'S ISSUE

CONTAINS articles by the following named authors:

LUND, FRED B. A.M., M.D. Harvard, 1892. F.A.C.S. Surgeon-in-Chief, Carney Hospital; Consulting Surgeon, Boston City Hospital and several other hospitals in New England. His subject is: "A Case of Diverticulitis of the Fourth Part of the Duodenum". Page 986. Address: Carney Hospital, Boston.

CRILE, G. W. M.A., M.D. Cleveland College of Physicians and Surgeons, 1887. LL.D., M.Ch., F.A.C.S., F.R.C.S., D.S.M. Surgeon, Cleveland Clinic Hospital. His subject is: "New Clinical and Experimental Studies of the Interrelations of the Thyroid Adrenals and the Nervous System". Page 988. Address: Cleveland Clinic, Cleveland, Ohio.

CODMAN, E. A. A.B., M.D. Harvard, 1895. F.A.C.S. Member of the Committee on the Registry of Bone Sarcoma of the American College of Surgeons. Formerly Chairman of the Committee on the Standardization of Hospitals, Clinical Congress of Surgeons. His subject is: "John Wheelock Elliot". Page 994. Address: 227 Beacon Street, Boston.

DALAND, ERNEST M. A.B., M.D. Harvard, 1918. F.A.C.S. Chief of Staff, Pondville Hospital at Norfolk; Surgeon, C. P. Huntington Memorial Hospital; Surgeon to Out-Patients, Massachusetts General Hospital. His subject is: "Use and Abuse of Radium". Page 1005. Address: 483 Beacon Street, Boston.

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SPINAL ANAESTHESIA

It is not much over eighty years since physicians have had the power to remove the dread of pain from surgical procedures. Only recently the daily press has reported the employment of hypnosis as a means of securing this end. That this is not new may be confirmed by consulting the records of the Massachusetts General Hospital where, during the hospital service of the late Dr. Morrill Wyman, (66 yrs. before the 50th anniversary of the discovery of ether) will be found the record of a woman who had a cancer of the breast which she could not bring herself to the point of having removed until she learned of the visit to this country of a celebrated French hypnotist. She entered the Hospital and the surgeons invited him to induce hypnosis in her, which he did, but it had no anaesthetic powers apparently, for the operation had to be abandoned. From time to time modifications of old methods and discovery of new ones have been heralded as epoch making advances and naturally the advocates of the new must point to the failures of the old as the justification for the alleged advance. The training of professional anaesthetists has done much to bring peace to the mind of the operator and something, doubtless, to the security of the operated. Differentiation of those conditions which are better met by inhalation anaesthesia in some of its forms from those which are best dealt with by local or spinal anaesthesia has marked a decided advance in the art of the anaesthetist. The search for that drug which will produce complete relaxation, with safety to any condition with which one may be confronted, with a modicum of disagreeable after-effects and with avoidance of that which constitutes the patient's greatest dread viz: loss of consciousness, is the goal which has been sought. So far all methods, unless the Pitkin method is to prove an exception, have had their limitations. No claims should be considered valid at this time which involve comparisons of mortality statistics as between the Pitkin method and the inhalation methods. In fact it is unlikely that any very satisfactory basis of comparison between any two methods, one of which involves loss of consciousness and the other does not, can be found. What one is apt to forget in all such discussions is the fact that any method which is loudly acclaimed is certain to find users who have no more license to resort to the procedure than they have to undertake the surgery to which anaesthesia is a preliminary. The risks of infection can't be denied where the meninges are involved and skin has to be traversed which

harbors organisms in its deeper layers. It is to the class of surgeons above referred to against whom the public must be defended and any improvement in anaesthesia, no matter how valuable, is a menace unless it is "fool proof." Once the fear or loss of consciousness under anaesthesia is removed it is going to be just that much easier for the unscrupulous operator to secure his opportunity to do useless or profitless surgery. This criticism is of course not applicable to surgeons in well organized hospitals where specially trained anaesthetists are available but is quite pertinent under conditions which we all well know exist and it is desirable that emphasis be thrown on the fact that spinal anaesthesia should only be employed where surgery is imperative and in patients in whom the careful administration of *any* form of inhalation anaesthesia is positively contraindicated, otherwise the glamour of a new method is certain to carry even conservative men off their feet. Something of a historical, bibliographical review of the subject of anaesthesia will be on exhibition at the Library during the week of July 8th.

MISCELLANY

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1927

The Council on Pharmacy and Chemistry of the American Medical Association annually publishes the reports which tell the reasons for non-acceptance of those products which during the year it has found unworthy of recognition. Some of these reports have been published in abstract in THE JOURNAL; all are contained in full in the volume which is the subject of the present review. The physician who has learned to ask the manufacturer's "detail" man, "If it is not in New and Nonofficial Remedies, why is it not?" will find here the answer which that personage will no doubt hesitate to give him. The book shows the practical working out of the principles which the Council's experience has shown to be essential in its fight for rationality in the field of proprietary medicines.

Among the products reported as unacceptable are: Bismogenol, which is bismuth salicylate under a fancy name; Desitin, a complex mixture from Germany; Hexol, a pine oil preparation for which unwarranted claims are made; Warnink's Advocaat, a mixture of potassium arsenite and alcohol in the form of an egg nog marketed without emphasis of the arsenic content in a way likely to lead to harmful and ill advised use by the public; and Solvo Aspirin, another futile attempt to market a solution containing acetylsalic acid rendered soluble by addition of sodium bicarbonate.

A glance at the index shows, however, that these reports do not always deal with articles that have been actually rejected by the Council. Preliminary reports are frequently made on new products which appear promising but for which there is not yet sufficient evidence to warrant inclusion in New and Nonofficial Remedies. Included in this group this year are: a report on Blueberry Leaf Extract, which gives promise of being useful in the treatment of diabetes; a report on "Plasmoquin," a substitute for quinine in the treatment of malaria brought out in Germany but thus far withheld from the market by the American agent; a report on "Alpha-Lobeline," which has been the subject of many conflicting estimates but which lacks conclusive evidence demonstrating its usefulness; two reports on Ephedrine, announcing standards, evaluating therapeutic usefulness, and finally announcing the acceptability of the drug and of two of its salts; a report on Bismarsen, a new derivative of arsphenamine containing bismuth and proposed for use in the treatment of syphilis.

Of much current interest is the reprint of the report of Dr. R. A. Hatcher reviewing the literature on the Gwathmey method of colonic anesthesia and evaluating the present standing and usefulness of this method. This report is an outstanding example of the way in which the Council in addition to its other activities aims to contribute to the advance of general medical knowledge.

Another publication under the title of *New and Nonofficial Remedies*, contained descriptions of the articles which stand accepted by the Council.

This book is the work of a distinguished organization, which some twenty years ago was founded to clean out the Augean stables of proprietary medicines. The Council's plan was and has been the publication annually of a book containing descriptions of those unofficial preparations which after careful investigation have been found worthy of recognition and consideration by the medical profession. Such has been the devotion of the Council members, who serve without remuneration, and such the recognition achieved by their work that today the book describes all the new proprietary products which have a scientific base and which give promise of therapeutic usefulness. The physician who best safeguards his own interests as well as those of his patient will give no consideration to any proprietary medicinal agent which is not listed in New and Nonofficial Remedies.

The book is conveniently arranged for reference: each preparation is classified, and each classification is preceded by an authoritative and up to date discussion of the composition, actions, uses, and dosage of the medicament involved. Annually the book is carefully scrutinized and revised to ensure its being in the forefront of medical progress. Products that have been admitted are reexamined at stated intervals to determine if they are keeping their promise of therapeutic usefulness; and new products are admitted as they are found acceptable.

Among the more important revisions this year are: the rewriting or recasting of the chapters on Medicinal Foods, Insulin, Arsenic Compounds, and Iron and Iron Compounds; revision of the chapters on Ovary and Parathyroid to make them conform to the results of recent research; and revision of the names and standards of the acriflavine dyes. A noteworthy omission is that of all parathyroid gland preparations designed for oral administration, their lack of efficacy by this route having been conclusively demonstrated.

The following are some of the products which have been recognized during the past year and which are now included in the book: Neonal, a new barbital compound; Mesurol, a bismuth preparation for use in the treatment of syphilis; Bromural, once omitted from the book, but now reinstated as a result of the manufacturer's limitation of therapeutic claims;

a number of standardized cod liver oils; Ephedrine, an alkaloid with epinephrine-like properties, and its hydrochloride and sulphate salts; Amiodoxyl benzoate, the ammonium salt of orthoiodoxy-benzoic acid, proposed for the treatment of arthritis; Crotalus Antitoxin, an antisnakebite serum; several brands of erysipelas streptococcus antitoxin; and Anaerobic Antitoxin, and antitoxic serum for use against gas gangrene.

On account of the careful revisions and the current additions, New and Nonofficial Remedies is essentially a new book each year, indispensable to the physician who would keep up with the march of therapeutic progress.

COMPARISON OF DISEASE INCIDENCE IN CONNECTICUT WITH 1927 AND SEVEN YEAR AVERAGE

WEEK ENDING JUNE 9

1928	Wk. ending May 19	Wk. ending May 26	Wk. ending June 2	Wk. ending June 9	Average cases reported for week corresponding to June 9 for past seven yrs.	Wk. ending May 21	Wk. ending May 28	Wk. ending June 4	1927 Wk. ending June 11
Actinomycosis	-	-	-	-	-	-	-	-	1
Anthrax	-	-	-	-	-	-	-	-	-
Botulism	-	-	-	-	-	-	-	-	-
Cerebrospinal Men.	2	2	3	-	1	1	-	-	-
Chickenpox	63	73	55	40	78	141	139	114	123
Conjunctivitis Inf.	-	-	-	-	1	1	-	-	-
Diphtheria	23	26	27	11	31	22	36	26	31
Dysentery, Amoebic	-	-	-	-	-	-	1	-	-
Dysentery, Bacillary	-	-	-	-	-	-	-	-	-
Encephalitis, Epid.	-	-	-	3	1	-	-	1	1
Favus	-	-	-	-	-	-	1	-	-
German Measles	31	29	31	34	16	26	31	8	5
Hookworm Infection	-	-	-	-	-	-	-	-	-
Influenza	46	27	13	2	2	2	1	4	2
Leprosy	-	-	-	-	-	-	-	1	-
Malaria	-	-	-	-	-	-	-	-	1
Measles	279	354	351	340	192	44	57	44	67
Mumps	104	93	76	116	38	43	75	57	37
Paratyphoid Fever	-	-	-	-	-	-	-	-	-
Pneumonia (Broncho)	42	44	26	38	23*	35	26	16	22
Pneumonia (Lobar)	61	68	19	33	22	39	39	20	25
Poliomyelitis	-	-	1	-	-	1	-	-	-
Scarlet Fever	132	78	42	39	54	99	76	68	89
Septic Sore Throat	2	-	-	1	-	-	3	1	5
Smallpox	4	2	1	3	1	-	-	-	-
Tetanus	-	-	-	1	-	-	-	-	-
Trachoma	-	-	-	-	-	-	-	1	-
Trichinosis	-	-	-	-	-	-	-	-	-
Tuberculosis (pul.)	47	24	58	31	34	30	26	17	28
Tuberculosis (o.f.)	3	3	1	5	3	3	3	3	3
Typhoid Fever	-	1	-	2	3	-	1	-	2
Typhus Fever	-	-	-	-	-	-	1	-	-
Whooping Cough	96	115	108	102	47	14	18	39	13
Gonorrhoea	24	41	13	32	17	36	51	67	24
Syphilis	35	29	17	50	23	26	32	29	29

*Average for three years. Made reportable January 1, 1925. Remarks: No cases of cholera, Asiatic, glanders, plague, rabies in humans and yellow fever during the past seven years.

WINNERS IN THE HEALTH SCHOLARSHIP CONTEST

Announcement was made today of the winners in the Teachers' Health Education Scholarship Contest conducted by the Massachusetts Tuberculosis League. Those to receive prizes were Miss Ethel Standish, Grade 3, Clapp School, Stoughton; Miss Agnes E. Murphy, principal of the Clapp School, Stoughton; and Mr. John P. Sullivan, Washington Irving School, Roslindale. Honorable mention was made to Miss Mary P. Doherty, Grade 2, Franklin School, Malden. The awards to the successful contestants were in the form of scholarships for work in health education in the summer course under Professor C. E. Turner of Technology.

This contest has been open to all classroom teachers in the state. The basis for the awards was made on such vital health points as improvements and gains in the children; a report showing the kind of health teaching and how developed; and the teacher's attitude toward and ability in the field of health education.

Miss Jean V. Latimer of the faculty of the Hyannis State Normal Summer School, Miss Georgie B. Collins, health supervisor in the Malden Public Schools, and Dr. John Ceconi, chairman of the School Committee, served as judges in this contest.

RECENT DEATHS

TRIPP—Dr. G. Alston Tripp, 55, skin specialist and physician of South Worcester, died June 14 at his home, 444 Cambridge Street. For 30 years Dr. Tripp practiced in South Worcester.

Though in ill health for some time, he continued to hold office hours until confined to his bed as a result of a weakened heart.

For over 30 years he practiced from the same office at 477 Cambridge Street.

Since his graduation from the Bowdoin Medical School, he had lived in Worcester, coming to the Worcester City Hospital for his interneship and taking a position on this institution's staff following its completion. Up to two years ago he conducted the City Hospital skin clinic and since that date had been a member of the staff as a consultant physician.

Dr. Tripp was born in Embden, Me., Sept. 18, 1872, the son of Richard and Mandana (Lawry) Tripp. He attended the North Anson Academy at North Anson, Me., going to Bowdoin College for his undergraduate studies. Following his graduation he entered the Bowdoin Medical School, was graduated as doctor of medicine and came directly to the Worcester City Hospital. He married Miss Mary Schultz, who survives him.

He also leaves three sons, Alston C., Robert H. and Paul W., a brother Harry of Portland, Me., and two sisters, Susan of Onset, Mass., and Nellie of Madison, Me.

Dr. Tripp was a member of the Practitioners' Club of Worcester, of the Worcester District Medical Society and for more than 30 years had been physician for the Whittall Mutual Aid Society of the Whittall Associates.

WEBBER—Dr. Frederick Ward Webber, long a practitioner of Newton, died in that city, June 19, 1928, of pneumonia, at the age of 70.

He was born in Cambridge Jan. 24, 1858, the son of Dr. Alphonso Carter Webber, a Fellow of the Massachusetts Medical Society, and Laurentia Balcom Webber. He was graduated from Harvard Medical School in 1879, and joined the State Medical Society the following year. He was a Fellow of the American Medical Association, a member of the Cambridge Medical Improvement Association and of the Boston Medical Library. He is survived by his widow, Mrs. Mary Jane Rogers Webber and by one unmarried daughter.

BRAYTON—Dr. Roland Walker Brayton, a Fellow of the Massachusetts Medical Society, died at his home in Dorchester, June 20, 1928, at the age of 50.

Dr. Brayton was a graduate of Harvard Medical School in the class of 1900 when he studied abroad in Paris and Heidelberg and then settled in Dorchester in 1903. He was a member of Algonquin Lodge of Masons, the Dorchester Club, Shawmut Club, the Dorchester Medical Society and he was the first president of the Field and Forest Club. He is survived by his widow, a son and two daughters.

PERCY—Dr. Frederick Bosworth Percy aged 71, graduate of Yale, class of '77, died at his home in Brookline, June 15, 1928 after a long illness.

Dr. Percy was born at Bath, Maine, July 23, 1856, son of David Thomas Percy. He attended the Bath public schools and was graduated A.B. from Yale University and from the Boston University School of Medicine in 1880. He was married to Ada Lieber Livingston Goodsell, June 15, 1881, and she died in 1891. Dr. Percy settled in practice in Dorchester, moving to Brookline early in his career.

From the beginning of his practice until his death he was a member of the faculty of the Boston University School of Medicine, first as professor of materia medica, then as professor of Clinical Medicine and finally as emeritus professor of the latter department. He was for ten years a member of the Brookline school committee and was actively interested in official town affairs. He took an active part in the early movement for State control of tuberculosis. He was a trustee of the State sanatorium at Rutland and a member of the building committee and consultant at Westboro Insane Hospital. Dr. Percy became a member of the Massachusetts Homeopathic Medical Society in 1882; in 1927 he delivered an address on the "progress of medicine during the past thirty years" before the annual meeting of the Society at Worcester. During the World War he was an active member of the Massachusetts Committee of the National Defense, Medical Section. His hearty whole-souled manner made him a host of friends.

He is survived by a widow, Mrs. Elinor Bellows Wheelock Percy, whom he married on Jan. 31, 1893; a daughter, Mrs. W. W. Duffett, Jr., three sons, Dr. Karlton G. Percy of Chestnut Hill and Boston, a Fellow of the Massachusetts Medical Society, Robert B. Percy of Westboro, Donald B. Percy of New York, and three brothers, Dr. George Percy, Salem; A. A. Percy, Bath, Me., and Dr. D. T. Percy, Arlington.

He was a member of St. Paul's Episcopal Church, Brookline; the University Club, Yale Club, American Institute of Homeopathy and the Massachusetts Homeopathic Medical Society.

OBITUARIES

DR. FREDERICK B. PERCY

So seldom does the medical profession suffer the loss of a member of the quality of Dr. Frederick B. Percy that his passing assumes the solemn distinction of a notable event. He exemplified the family medical counsellor at his best. Notwithstanding the disconcerting trend toward pleonastic specialization, he steadfastly continued to the end the wise, the friendly, the resourceful family physician.

Among the youngest, most beloved and most gifted graduates of Yale, he brought to the practice of his profession, in addition to his admirable medical training, rare insight, sympathy, and personal charm. He early found himself in the midst of an extremely active professional life. Grateful for the unselfish labors of those whose lectures supplied his medical equipment, he in turn assumed the burden of a chair in Boston University School of Medicine. A personable presence, good voice, finished diction, and, above all, a sound and comprehensive knowledge of his subject gave his lectures a dignity which none privileged to sit under them will ever forget.

The art of teaching and the art of medicine are seldom housed within the same brain. Both are gifts for the gracious dispensing of which few individuals are endowed. Dr. Percy had these gifts in unusual combination and so employed them as to leave with all who knew him a deep sense of personal obligation.

A. E. P. ROCKWELL.

June 20, 1928.

BENJAMIN TENNEY

There comes to many a youth a vision which guides him in his training and in the development of those subtle and potentially strong qualities which need only opportunity and persistent application to convert them into working forces for the good of humanity.

In the small community of Thetford, Vermont, there was born on October 6, 1863, one whose youthful analysis of life directed him in the thought that education was the first step to lead a boy to a point where he could see and measure a future path.

Benjamin Tenney was graduated at Barre Academy, Barre, Vermont. He then entered Dartmouth College, receiving in 1883 his degree of Bachelor of Arts, and later the degree of Master of Arts. He was expected by his parents to return to pastoral pursuits, but the vision had unfolded to a point of fascination, where nothing discouraged the attainment of further knowledge and training. Endowed by inheritance with a mind alert to absorb and brilliant to impart knowledge, he came to Boston to increase inadequate funds to allow him to obtain a professional education.

He taught school in Leominster one year and in the Eliot School, North Bennet Street, Boston. He became Head Master of the Boston Evening High School November 8, 1892, where he had been an instructor during his medical study, and continued as such until December 16, 1898.

In 1888 he entered Harvard Medical School, where he was graduated in 1892. He was appointed medical interne at the Boston City Hospital for eighteen months. The fine quality of mind which for years had directed the youthful minds in the Evening School to analyze, to see accurately, to rearrange and draw conclusions had an opportunity to devote his superior teaching ability as an Instructor in Anatomy in the Harvard Medical School from 1893 to 1901, where he became most popular and valued. When the increasing demands of professional work upon his time necessitated his retiring from the field of medical instruction, his pupils, devoted to him and impressed with his teaching ability, implored him to accept a small selected group of students to meet regularly around his dining room table to quiz, lecture, and emphasize important studies in anatomy.

In 1896 Dr. Tenney received an appointment to the Medical Staff of the Boston City Hospital, to which he devoted his time and thought until 1898 when he resigned that appointment to develop and extend his increasing interest in surgical work.

His extensive knowledge of anatomy and his responsive and alert mind made his progress more rapid than would have been possible for one entering upon this very technical and rapidly growing specialty without the earlier hospital training which has generally been thought to be necessary. Determination was the guiding spirit to accomplishment and he prospered in his new field of activity. As a surgeon he devoted much time in the philanthropic service of the Boston Dispensary. He was largely instrumental in the development of the Berkeley Infirmary and virtually became its most important director and operator, retaining his active interest in that institution and enjoying its constant growth until he was stricken by illness.

Abruptly as by a bolt from a clear sky, when his professional practice was large and remunerative, he became aware in November, 1926, that he had a possibly incurable ailment. Within twenty-four hours his courage directed him to the only surgical measure which offered any possible hope of relief. It was not many weeks later that it became known that his term of life could be quite accurately measured and he responded with a nobility of Christian spirit and courage that was as instructive and showed his greatness of intellect as in his earlier days as a teacher.

He had a master mind: men of the generations who knew him will long remember his sterling qualities as a friend, a brother, a father, a counselor. He helped and taught others how to live:—his example of supreme Christian character, his fortitude in quiet acceptance of the inevitable will of God, have taught us how to die, and he leaves a cherished memory among his patients and friends that will endure forever.

CORRESPONDENCE

NOTES ON NATIONAL AFFAIRS

From Our Regular Correspondent

The first session of the Seventieth Congress, which convened on December 5, 1927, adjourned on May 29, 1928. This session had before it about 20,000 bills and resolutions, of which somewhat over 900 became laws, though most of these are of a private rather than a public nature. This Congress has given more consideration to public health and medical matters than has been the case for several years. All bills not finally acted upon will automatically be before the second session when it convenes next December.

THE TAX ON NARCOTICS

A proposal in the new revenue act to "reduce" taxes by raising the tax on physicians under the Harrison Antinarcotic Act from $1 to $3 was overwhelmingly defeated, in spite of persistent efforts by Senator Smoot to secure adoption of this increase.

DEDUCTION OF TRAVELING EXPENSES

Although the Senate passed an amendment to the revenue act which would have permitted physicians and sanitarians to deduct from their income tax computations personal expenses incurred in attending professional meetings, the House did not adopt this amendment and it disappeared from the bill during the conference on it.

VETO FOR PUBLIC HEALTH BILL

The Parker bill (H. R. 10126) for the coördination of federal health activities was passed by Congress, but was vetoed by the President on May 19th. The reasons given for this unexpected action were that this proposed law tended to "militarize" the Public Health Service and also was unconstitutional in one part. An opinion from the Attorney General was cited to uphold this last contention, the argument being that the bill limits the choice of Public Health Service officers appointed by the President to those who pass an examination and are recommended by the Surgeon General. Inasmuch as this system has been in operation, as sanctioned by law, since 1889, the Attorney General's opinion seems peculiar at this time.

Observers in Washington and elsewhere seem to think that the influence of Mr. H. M. Lord, Director of the Bureau of the Budget, and possibly that of Senator Smoot, had an effect on the President's action in disapproving this excellent bill.

ANOTHER VETO OVERRIDDEN

Eight bills were vetoed by the President about the time he disapproved the Parker bill. One of them was the measure providing retirement for disabled emergency officers of the World War, which includes many former medical officers. Congress promptly repassed this measure, along with two others, over the President's veto.

THE HEALING ART IN THE DISTRICT OF COLUMBIA

The bill to regulate the practice of the healing art in the District of Columbia, which has been outlined or mentioned several times in these notes, passed the Senate on May 29th, and a similar bill has been reported in the House. The Senate adopted an amendment offered by Senator Copeland providing that any chiropractor engaged in practice on January 1, 1928, would be licensed after he had made application and proved that he had a diploma from a legally incorporated chiropractic school, and was actually in practice.

PROGRESS ON OTHER HEALTH MATTERS

Among other new laws of interest to physicians are: additional hospitalization for veterans, with an appropriation of $15,000,000 for the purpose; government medical and hospital care for retired officers and enlisted men of the Coast Guard; and a measure relative to computing service of officers of the Medical Corps.

A number of bills pertaining to public health were passed by one branch of Congress. Thus, the Senate adopted a measure for an investigation of cancer, and one to regulate the sending of poisons through the mails. Senator Ransdell's bill for a national institute of health was reported to the Senate.

In the House, bills to establish two federal narcotic farms and to grant the pay and allowances of a colonel to the President's physician were passed, while the bill to amend the definition of oleomargarine was reported.

MEDICAL FACILITIES AT THE CAPITOL

Representative Kindred, who is a physician, has introduced a bill, H. R. 13854, to provide a room for medical service at the Capitol, with a licensed physician and registered nurse in attendance during the time when Congress is in session. The physician would receive compensation not to exceed $300 a month, and the nurse not over $200. This bill was stimulated by the recent death at the Capitol of an elderly Congressman and the fact that suitable therapeutic agents were not available at the time for use by physicians who came to his aid.

OTHER NEW MEASURES

Among health bills recently introduced in Congress and not previously reported in these notes are: H. R. 13902 for examinations of the criminally insane; S. 4463 for a children's tuberculosis sanatorium in the District of Columbia; S. 4478 to prohibit use of public funds for the purchase of butter substitutes for government wards; and H. J. Res. 309 authorizing the President to designate the first week in May of each year as national health week. A resolution was passed by this Congress to designate May first as National Child Health Day.

AUTOPSY FACTS AS EVIDENCE

The United States Circuit Court of Appeals for the Eighth Circuit has held recently in the case of the Travelers Insurance Company v. Bergeron that the facts obtained by a physician at an autopsy are admissible in evidence in a lawsuit. There was no relationship of patient and physician in the making of an autopsy and so the facts discovered do not constitute privileged communications. This case arose in Iowa and the statutes there regarding professional confidence likewise do not apply to autopsies.

A REPLY TO DR. MAURICE FISHBERG'S ARTICLE

"THE TUBERCULOSIS GAME"

(*American Mercury*, February, 1928, and *Long Island Medical Journal*, May, 1928.)

Editor, THE NEW ENGLAND JOURNAL OF MEDICINE:

Physicians, lay tuberculosis workers, and people who are interested in tuberculosis for humane reasons, who may have read Dr. Maurice Fishberg's article in *The American Mercury* for February, 1928, entitled "The Tuberculosis Game," in which he attacks the National and local tuberculosis associations for their Christmas Seal Campaign, their publicity method, and work in general, have perhaps wondered why the officers of those associations, or at least those of the principal one—the National Tuberculosis Association—did not reply to the statements made by Dr. Fishberg.

The author of this sensational and sarcastic contribution characterizes the work of those societies and committees as unnecessary and the anti-tuberculosis publicity as costly and useless. A "piffle" is the dignified term which the learned doctor chooses to apply to the association's methods of anti-tuberculosis publicity and the way they procure the funds to defray the expenses with the aid of the Christmas seal campaign.

I think it was a wise decision on the part of the officers of the National Association to ignore such sensational and totally unfounded accusations as long as they appeared only in a lay periodical which has a more or less popular class of readers. Dr. John B. Hawes, 2nd, President of the Boston Tuberculosis Association, neverthless did reply very tersely to Dr. Fishberg's accusations. Unfortunately, this reply appeared only in *The Boston Herald* and in the *Massachusetts Health Journal*. I read Dr. Hawes' reply with great satisfaction for it refutes the unwarranted statements made by Dr. Fishberg in a splendid and a scientific manner.

Now however the May number of the *Long Island Medical Journal* has come out with an exact reproduction of the *Mercury's* article by Dr. Fishberg and under the same sarcastic title, "The Tuberculosis Game." The *Long Island Medical Journal* is almost exclusively read by medical men, and other medical journals naturally take notice of its contents. Thus the editor of one of the most widely read periodicals, devoted to hygiene and sanitation, has written me, asking my opinion on Dr. Fishberg's article and whether there is any truth in or foundation for his derogatory statements. The editor states that he has been advocating the Christmas Seal Campaign in his journal and has freely advertised it heretofore in the December issues. Now, however, he wonders if he should do this again and whether Fishberg may not be right after all and if the claims of the various associations for success in the reduction of the morbidity and mortality of tuberculosis are correct and the expenditures for publicity justified.

I have received other inquiries from individuals, particularly medical authors, asking my opinion on the subject. Perhaps they choose me as a source of information because of my close connection with the National Tuberculosis Association from its inception. Instead of replying individually to the various inquirers, I have decided to write a statement for publication in some of the leading medical journals of our country and will feel honored by those which will give my communication the hospitality of their columns. I hope thereby I may be able to clear the atmosphere and at least enable the American physicians who may be concerned to judge whether Fishberg's rather slanderous contribution published in *The American Mercury* and in the *Long Island Medical Journal*, entitled "The Tuberculosis Game," has any foundation whatsoever.

When Dr. Fishberg maintains that the National and local tuberculosis associations, at the present time, only work to prevent infection which exists virtually in every person living in civilized communities, he is seriously mistaken. We all believe that a slight tuberculous infection is perhaps immunizing in many instances and that such infection is not to be considered a tuberculous disease, or to be feared. On the other hand, all medical and social workers in tuberculosis consider it their business to spread the knowledge of the infectious nature of tuberculosis and teach precaution, which will guard the suspect, the predisposed, or the frequently exposed individual from additional infection and the likelihood of developing the disease. This is particularly necessary when concomitant with the suspect's status there exist other pathological conditions tending to develop a mere tuberculous infection into typical tuberculous disease.

Nearly all local tuberculosis associations have long since found it incumbent upon them to pay particular attention to the contributing factors in the development of tuberculosis. The New York Tuberculosis Association has for this reason changed its name to "Tuberculosis and Health Association". It has a cardiac and a dental division working hand in hand with its tuberculosis activities, and general health education for adults. Its health work among children consists in country vacations for the undernourished, open air and nutrition classwork, dental hygiene in the schools, care for babies of tuberculous mothers. Mrs. Hermann M. Biggs, one of the New York Association's most active members, has recently published in conjunction with Pearl S. Shackelford, Nutritive Adviser of the New York Tuberculosis and Health Association, a most valuable contribution entitled "Every Child's Dietary for Mothers and Children."

Of course, Dr. Fishberg has a right to his own ideas on the principles of contagion and the transmissibility or non-transmissibility of the disease, but from what my own lengthy experience in dealing with the tuberculous has taught me, I thoroughly disagree with him. I believe that the transmissibility of tuberculosis has been amply proved and should be guarded against, that suspects should be watched and prevented from developing tuberculosis, that popular education has been in no small degree responsible for the marvelous reduction in the tuberculosis morbidity and death rate, and that to treat the social aspect of tuberculosis is as essential as the medical prophylaxis and therapy.

One of our greatest sanitary authorities, Dr. Matthias Nicoll, Jr., New York State Health Commissioner, the former coworker with and now the successor to the late Hermann M. Biggs, although perhaps with no thought in his mind to reply to Dr. Fishberg's statements concerning the uselessness of teaching sanitary precautions and the little value of public health nurses, has given in *Health News* of the State Department valid reasons for the importance of reporting cases and the examination and reëxamination of contact and suspected cases. Dr. Fishberg's slur on the activities of public health nurses, who he says "pester wives of tuberculous husbands to attend clinics for observation or as suspects, which they may remain for years," is, to say the least, tactless and uncalled for. Here are, according to the *Health News* of the State Department of April, 1928, "Some of the Reasons Why Tuberculosis Should be Reported", why tuberculosis is more frequent among contacts than among non-contacts, and why the public health nurse is an invaluable aid to the busy physician treating tuberculous cases.

"Reports provide data valuable to both physicians and the public through more efficient public health nursing. Physicians as a rule define the necessary procedures and precautions to prevent the spread of tuberculosis. Most physicians in general practice are too busy to go into the home to teach people the necessary preventive measures. They may tell the people what to do but the public health nurse, work-

ing in coöperation with the family doctor, 'can show them how to do it.' These nurses as a rule will visit only cases suggested by the family physician.

"According to some studies, tuberculosis is found about six to nine times as frequently among contacts as among non-contacts. It is therefore obvious that those who are or have been in contact with cases of active tuberculosis should be examined. The nurse visiting reported cases can often use her influence to persuade other members of the family to have a thorough chest examination, and thereby aid in the discovery of other cases early, or perhaps in the discovery of the source of infection of the reported cases. Such reports are comparable to a system of bookkeeping. The accurate statistics

(a) Aid in taking account of stock.
(b) Indicate the magnitude of the problem.
(c) Help to evaluate the work being done and show where to concentrate future efforts.
(d) Indicate the general trend of disease.

Records are confidential and, therefore, no harm is done to the patient. Reporting tuberculosis by physicians and institutions is mandatory under section 320 of the Public Health Law."

Dr. Fishberg cites the "rarity of tuberculous disease in doctors, nurses and others on the hospital staff of institutions harboring tuberculous patients" as an evidence of the nontransmissibility of this disease. He says that "Experience shows that they are no more liable to develop the disease than persons engaged in other callings and less exposed to infection. And it is not only a fact now, with precautions taken against infection, but it was observed long ago, when tuberculosis was not treated as an infectious disease."

The latter statement is incorrect. Those of us who can think, or wish to think, a little further back than Dr. Fishberg, will recall how frequently tuberculosis was contracted by interns and nurses in general hospitals when the disease was not considered transmissible and no precautions against infection were taken. Why the same class of persons—physicians and nurses—do not contract tuberculosis nowadays in sanatoria and tuberculosis hospitals is just because the utmost precautions are taken against infection from tuberculous sputum and saliva, and the patients are taught to suppress useless cough. We tell the apprehensive patient that the sanatorium is the safest place for not contracting tuberculosis, and the visitors will hear less coughing in such an institution than is often observed in crowded theaters, movies or churches.

Tuberculosis propaganda costs money, like any other propaganda, be it for political or economic purposes, or a crusade against cancer, venereal or mental diseases. Enlightening literature, leaflets of instruction, exhibits, etc., cannot be supported on air; social workers and nurses must be paid. Because tuberculosis is so widespread, so universal, the maintenance of tuberculosis clinics when not supported by State or municipality, private sanatoria for the poor and those of moderate means, receive aid and support directly or indirectly from the tuberculosis propaganda with the aid of Christmas seals. Dr. Fishberg again does an injustice to the cause when he says: "Palliative measures, such as the building of sanatoria and hospitals for the tuberculous sick, or rendering these unfortunates the financial assistance which they need badly if they are to be cured, are rather foreign to the aim of the crusaders. This work is left to other agencies, to which they give advice whether it is solicited or not."

Having been a humble coworker with those noble men and women, physicians and laymen, for over a quarter of a century who pleaded and worked for the establishment of sanatoria, special hospitals, clinics, workshops for employment of arrested cases, committees to aid in the home treatment of the tuberculous, providing needed financial aid to the families when the breadwinner is tuberculous, etc., I know they never have imposed nor do impose their advice or counsel on any group of men or women, unless such advice and help is sought. The National Tuberculosis Association has its experts on climate and localization, construction of sanatoria, clinics and workshops, on home treatment, etc. The association is frequently consulted by committees wishing to establish tuberculosis institutions, and by philanthropists desiring to give financial assistance to the tuberculosis cause in one way or another. In many communities it is the National and local tuberculosis associations that are largely responsible for the establishment and maintenance of sanatoria, special hospitals and clinics which have proved and are proving a blessing to thousands of sufferers.

There is not one argument against tuberculosis propaganda or criticism of preventive measures in Dr. Fishberg's lengthy article which is not refuted by the daily experience of those engaged in the work. He even contradicts himself in the following statement wherein he says: "One eminent medical man who has studied the problem in great detail, and who is not only a laboratory worker but also a practicing physician of high attainments, reports that he placed a feeble-minded child in a bed in which a patient with advanced tuberculosis, expectorating rather carelessly myriads of tubercle bacilli, slept for several days—and the child was not infected. The same doctor watched his own children while they were brought up in a large city and had many opportunities to inhale tubercle bacilli and become infected if sputum deposited on clothing could ever prove infection. But his children remained free from this taint until they came into direct contact with a person who coughed and expectorated tubercle bacilli."

Dr. Fishberg does not tell us how long the feeble-minded child, which might have been immune owing to an infantile infection, had remained free from the disease after having been exposed for several days. No conclusion can be drawn from such a statement without the knowledge of many other factors and it is to be hoped that it was not on the strength of this failure to contract the disease that the eminent medical man, who had studied the tuberculosis problem a great deal, allowed his own children to come in direct contact with a person who coughed and expectorated bacilli. Dr. Fishberg calls the leaflets and booklets on the prevention of tuberculosis "piffle", but the perusal of such "piffle" might have enlightened the "eminent medical man" on how he could have guarded his own children so that they would have remained "free from the tuberculosis taint."

In the final paragraph of his 18 column tirade, the author of "The Tuberculosis Game" makes a great deal of "the paucity of exact knowledge of tuberculous infection." Granted that opinions regarding the modus operandi of tuberculosis infection may differ, the fact is established, and it is even admitted by Dr. Fishberg that direct and prolonged contact with tuberculosis coughers is responsible for the

propagation of the disease. I venture to say that the majority of clinicians and sanitary authorities agree on the importance of this type of transmission of tuberculosis and on the relative unimportance of possible infection through "intermediate things, such as clothing, telephone receivers, door knobs, and the rest of the 119 points of contact" which Dr. Fishberg sarcastically says "mentioned above."

In brief, that Dr. Fishberg should have made this wholesale condemnation of the anti-tuberculosis publicity campaign is most regrettable as it has no scientific nor ethical foundation. He is not only unfair to thousands of ethical tuberculosis workers, but his statements reflect on his own failure to realize that to combat tuberculosis as a disease of the masses requires educating the masses and that tuberculosis associations all over the civilized world have done and are doing this most successfully. That we are far from having completely mastered tuberculosis is evident, for it still afflicts thousands of men, women and children, while in young women there has even been a relative increase in the morbidity as well as the mortality of late. There is indeed need of much more education.

The Christmas Seal Campaign is a legitimate, honest and ethical means to bring about this education, and it gives everyone an opportunity to participate in furnishing the means to be helpful in an ultimate victory over the great white plague.

There is one more point which I must mention in conclusion. This is the great influence the anti-tuberculosis movement, as carried on by the National and local tuberculosis associations, has exerted on nearly all the other health movements in the United States. For the details concerning this I must refer those interested to an article entitled "The Anti-Tuberculosis Crusade as an Inspiration to Modern Health Activities," which appeared about a year ago in the tuberculosis number of *Medical Life* (Vol. 33, No. 12). Herein was brought together the evidence of the beneficent and invaluable work the various tuberculosis societies and committees have done in aiding indirectly in the combat of the many other diseases of the masses, besides tuberculosis.

S. Adolphus Knopf, M.D.
16 West Ninety-fifth Street, New York.

WHITE ROBED DEVILS?

Mr. Editor:

The affection felt for the medical profession, shown some years ago when the antivaccinationists in this State presented to the Legislature a bill which would prevent any physician from becoming a member of a Board of Health, apparently grows more intense as one proceeds westward.

The "open door" according to the American Association for Medical Progress refers as follows to the use of small quantities of blood in the preparation of a preventive serum for infantile paralysis said blood coming from patients in the Los Angeles Orthopedic Hospital:

"By the shades of burned witches and long lost demons, by the light of an everlasting hell, what does this portend? May we soon expect to meet with white robed devils, with vessels and knives that they may force themselves into our very homes and demand the blood of our children and of us as a donation to send hocus-pocus serum?"

We can easily imagine our fancy big policeman standing by to compel by law that we offer up our little tots to this diabolic cult that they may have more blood with which to concoct still more serums perhaps of fatal quality.

Westward the star of empire takes its way.

Samuel B. Woodward.

ILLNESS CAUSED BY CONTAMINATED FOODS

City of Boston
Health Department
City Hall Annex

Boston, June 22, 1928.

Editor, New England Journal of Medicine:

At a recent advertising exhibition in Boston of an electric refrigerator where motion pictures of *paramesia* served to show the people how the activity of pathogenic bacteria was inhibited by refrigeration, there also appeared the following exhibit:

Treasury Department
Bureau of the U. S. Public Health Service
Washington, September 29, 1927.

Office of the Surgeon General.

Frigidaire Corporation,
Third National Building,
Dayton, Ohio.

Gentlemen: (Attention of Mr. E. J. Huber.)

Receipt is acknowledged of your letter of September 21, making inquiry as to the percentage of illness caused by eating food that has been made dangerous by contamination with disease breeding bacteria.

In reply I regret to state that the United States Public Health Service has no statistics on the subject in which you are interested, but it is believed that if water and milk are included within the definition of food, approximately seventy-five per cent. of the cases of contagious and communicable diseases are the result of eating food that has been contaminated with disease bearing bacteria.

(Signed) R. C. Williams,
Assistant Surgeon General.

It would seem that this statement ought to be interesting to readers of the Journal.

Victor Safford.

KEEP THE RECORD STRAIGHT

Mr. Editor:

The consuming community (i.e. the consuming public) should pay all cost of production, including expenses of the Workmen's Compensation Act, embracing hospital and medical charges. This is logical and just.

Contention that a local industrial community should share in expense is especially unjust when it is considered that these industrial communities are those less able to do so.

A representative of an insurance company recently said: "The mills built and financed . . . . hospital of 150 beds." This remark was checked up from the latest report of this hospital. Only 7½% of its endowment fund was received from the industries of the community. None of the larger bequests were made by individuals connected with manufacturing.

What would be the response if the municipality or a group of generous individuals were asked, by an industry or an insurance company, to build and equip a plant for the repair of the wood and iron machines used. What response would the workingmen of the community make to an invitation to work part time, without pay, in such a plant?

When logic and justice both point to one solution of a problem, this must be the correct one.

It is the confident belief of many interested parties that those intrusted with the administration of the Workmen's Compensation Law will find the just solution.

The Accident Board have done a difficult piece of work well. The Special Commission of '26-'27 deserved and received commendation for its work and report. The representative of the medical profession on the Special Commission discharged a difficult duty justly and deserves our thanks.

W. H. MERRILL.

DR. GRAHAM OF THE "TEMPLE OF HEALTH", AND HIS EARTH BATH EXHIBITION, THE HAYMARKET

Mr. Editor:

According to Fitzgerald there is good evidence that Lady Hamilton, the erst-while Emma Hart, may have acted as assistant for a time, before her marriage and elevation to high society, to this famous quack, who had such a vogue in London about 1783.

Fitzgerald in his "Kings and Queens of an Hour" (Tinsley Bros., London, 1883), gives the following letter from Angelo, the famous fencing master:

"When that rage and curosity which encouraged Dr. Graham about the year 1783 at his temple of health, Pall Mall, began to subside, he imposed on the credulous part of the public with his earth-bath exhibition in Panton St., Haymarket."

"I was present at one of his evening lectures upon the benefits arising from earth-bathing, (as he called it), and in addition to a crowded audience of men, many ladies were there to listen to his *delicate* lectures. In the centre of the room was a pile of earth in the middle of which was a pit where a stool was placed: we waited some time, when much impatience was manifested; and after repeated calls 'Doctor, Doctor!' he actually made his appearance *en chemise*."

"After making his bow he seated himself on the stool, when two men with shovels began to place the mould in the cavity; as it approached the pit of his stomach he kept lifting up his shirt, and at last he took it entirely off, the earth being up to his chin, and the doctor being left in *puris naturalibus*."

"He then began his lecture, expatiating on the excellent qualities of the earth-bath. . . . It will perhaps hardly be believed that such an exhibition would have been permitted in what is called an enlightened country, it was however, not only tolerated, but received much encouragement from persons who possessed great influence in the fashionable world."

Earth baths in 1783, for all the ills that fish is heir to, and violet rays in 1928.

There is no accounting for tastes, as the woman said, when she osculated the bovine proboscis.

Very truly yours,

WM. PEARCE COUES, M.D.

May 25th, 1928.

STATE HEALTH OFFICERS MEET

(From our regular correspondent)

Leprosy, fish tapeworms, trachoma, goiter, health of Indians, typhoid carriers, and milk were the chief topics discussed at the 43rd annual conference of State and provincial health authorities of North America held at St. Paul on June 8th and 9th. This meeting was also combined with the 26th annual conference of the State and territorial health officers with the United States Public Health Service. The health officers of all the New England States, except New Hampshire, were present at this meeting.

The difficulties in controlling typhoid carriers were presented in a vivacious manner by the health commissioner of Massachusetts, Dr. George H. Bigelow, who also contributed profusely and poignantly to the discussion on other subjects, particularly goiter and milk.

Following a report by its milk committee, in which recent epidemics due to contaminated milk were outlined and the recommendation made that the Standard Ordinance developed by the United States Public Health Service be more widely adopted, the conference passed a resolution, drafted by Dr. Bigelow, reasserting its confidence in adequate pasteurization as a factor of enormous importance in protecting the most important food product, milk. The conference also recommended that the Inter-state Quarantine Regulations be amended to include certified as well as pasteurized milk to be allowed on interstate railroads. The Surgeon General signified that this would be done.

Other resolutions adopted by the conference included indorsement of a bill in Congress proposing federal subsidies to the States for rural hygiene activities, a resolution expressing sympathy to the State health officer of Louisiana for "undeserved humiliation" suffered by him at the hands of the governor, and a resolution urging that detailed reports of cases of tuberculosis be required by health officers, so that thorough registration of cases may be made as a step toward control of the disease.

Dr. M. Nicoll, Jr., State Commissioner of Health of New York, was elected president of the conference, and Dr. W. M. Dickie of California was elected vice-president. Dr. A. J. Chesley of Minnesota was re-elected secretary-treasurer. Among the new members elected to the executive committee, of which Dr. Bigelow is now a member, was Dr. B. U. Richards of Rhode Island. The conference voted to hold its next meeting in Washington, D. C.

WEST END NEIGHBORHOOD CONFERENCE

June 11, 1928.

Editor, THE NEW ENGLAND JOURNAL OF MEDICINE:

I am inclosing, herewith a copy of the report of the development of Street Play in the West End, from 1925 to the present time, which was submitted at the meeting of the West End Neighborhood Conference, which was held on Monday, June 4, 1928, at 8 o'clock at the Elizabeth Peabody House.

The committee that functioned last year was reappointed to carry on the work of Street Play this summer:—Father Smith, chairman; Mrs. Ida Z. Green, vice-chairman; Miss MacIntyre, treasurer; Miss Towne of the Bowdoin School and Miss Prescott of the Family Welfare Society. An effort is now being made to raise $300.00—salary for two recreational workers to carry on this phase of the work

that is found to be so necessary in this crowded community.

Very truly yours,
(MRS.) IDA Z. GREEN, *Secretary Pro Tem.*
West End Neighborhood Conference.

STREET PLAY

The number of children playing in the streets during the summer seasons, troubled the community worker to the extent that, in the spring of 1925, she conferred with Mr. Young and Miss Murphy of the Department of Physical Education in an effort to remedy the situation. That summer, arrangements were made with Mr. Young for an experienced playground worker to be designated to the Charlesbank Playground, to coöperate in carrying out the following plan: The West End Jewish Community Center would provide two workers to direct the groups of children to the Charlesbank, where the playground program would be correlated with that of the Center:—program to include games, both passive and active, handicraft, health work, dancing and free play. The coöperation of the Department of Physical Education having been secured, the West End Jewish Community Center was hopeful that the summer season would bring a minimum record of fatalities and a maximum of utility.

The Center workers led the children to the playground in the morning hours and remained with them until the afternoon, when they would take them home. Difficulties, however, arose from the very start. Some of the belated children, realizing that the Center worker had already gone to the playground, would attempt to cross Charles Street by themselves; this constituted a serious menace. Furthermore, the children who did come with the Center workers insisted on playing with them and refused to coöperate with the playground workers, although the playground and Center workers coöperated to the fullest extent. The expectant harmony among the different groups of children was not obtained. Some of the children, during the noon hour, would run home without the worker, causing a great deal of concern lest they come to some accidental harm. From the point of view of the groups, the activities carried on, the summer was successful. Approximately 80 boys and 40 girls were benefited through the efforts of the workers.

In the fall of 1925, a conference was held with the Department of Physical Education, and the community worker suggested the following for the coming summer: that experienced playground workers should again be available; that the various school yards in the West End should be opened and equipped for playground purposes and a playground leader provided for each school yard. This would enable the Center workers to conduct several successive groups of children to the various playgrounds. Instead of having to remain with the children on the playground, it was thought that once the children were in the hands of the playground worker, the interest of the young ones could be retained. Mr. Long, of the Park Commission, was again to be asked permission for the use of the baseball diamond on the Common, although the same difficulties of street crossings were being encountered.

In the spring of 1926, a conference was held to prepare for the summer activities. It was decided that South Russell Street, and other playgrounds be opened and equipped as fully as possible to meet the needs of the district. Playground workers for the approaching season were to be in full charge in their respective playgrounds, leaving the bringing of the children to the playgrounds as the sole responsibility of the Center workers. The Center workers were instructed to reach as many groups of children as possible, by playing with them for a short period of time in the streets, then directing them to the playgrounds, teaching them safety rules at the same time. In the past year, we had used, as already mentioned above, only the Charlesbank girls' and boys' playgrounds. This summer, we used as many playgrounds as we had in the community. Through the coöperation of the Department of Physical Education, two other playgrounds were opened and equipped and placed in charge of workers. The season ran from June 28th to September 2nd. Of the 33 streets in the West End, the Center workers were able to cover but 20 during the summer. Four hundred and seventeen children were taken to the playgrounds in their vicinity; that is, 10 to 15 children were daily added to the list of those already attending. Since the children were not remaining on the playground after the workers brought them there, another conference was necessary. It was evident that a more careful selection of playground workers was the important factor in this field of work. Miss Murphy made a special effort to secure efficient playground workers, resulting in greater coöperation between the playground workers and the Center workers. Street Play work, to us, was more or less unique, since we had no precedent to follow. It required a forceful, aggressive person to capture the interest of the children. It found that playgrounds, in and of themselves, as well as street play work that was being done, was not enticing enough to hold the children. By way of inducement, picnics were planned weekly. The reward for daily attendance at the playgrounds, was an invitation to the picnics. Groups of 30 children at a time, were taken for a full day's outing to nearby parks and beaches on these trips.

In the fall of 1926, a conference was held with Dr. Wilinsky, secretary of the West End Neighborhood Conference. The work done and its possibilities were presented to him with a view to presenting it to the West End Neighborhood Conference. A meeting of the West End Neighborhood Conference was called in the spring of 1927. The community worker presented a report of the work done and the possibilities for the coming summer. A committee on Street Play was appointed as follows: Father Smith, chairman; Mrs. I. Z. Green, vice-chairman; Miss MacIntyre, treasurer, and Miss Towne and Miss Prescott, members to discuss the ways and means of raising funds for the proposed recreational work. The committee decided that the various agencies and individuals in the community, interested in the work, be asked to contribute. Approximately $300.00 was raised. Two recreational workers were to be employed and were to be on the field beginning July 1st. The community worker outlined the work, then visited the district with the two recreational workers. The West End was divided into two parts; the playground sections, Myrtle to Leverett Streets, the section from Leverett to Nashua Streets running from Brighton Street, through to Norman, Pitts and North Margin Streets, where there were no playgrounds nor any facilities for play, other than one small corner, filled with bricks, the Minot Street corner of Lowell Street and one small private yard

on Hale Street, (Washington School had destroyed the only play space in this neighborhood). The workers were instructed to speak to the parents and children, to inform them of our purpose and who they were, where they were going to take the children, and to promise to bring them back at a certain time. The contacts, in this section, were particularly difficult to make because the mothers, who were mostly Italian, could not understand the purpose, nor were the children very friendly at first. They were accustomed to play in crowds on the sidewalks and in the middle of the streets. It took several days before the recreational workers could make the children understand—some of them could hardly speak English—that our visit was wholly friendly. Another obstacle to be overcome, was, of course, the distance to the playground from that section. The recreational workers would take the children's names, addresses and school attended, etc. Only some of the information was transmitted willingly; they were suspicious. Seeing a worker with a notebook and pencil in hand, many would run away and hide in the doorways. As usual, there were a few children who were willing to supply the needed information and they called it "belonging." The workers were instructed, if possible, to interest the leaders. In securing the leaders, they were pretty sure of a following of from 6 to 12 in each group. Three hundred-eighty-three children from this section were taken to the playgrounds. The older boys played in the yard on Hale Street where they practiced acrobatic stunts. They were anxious to have the recreational worker see their stunts and many additional ones were taught them by the worker herself. By gaining the confidence of these boys, it made it much easier to reach the rest of the children, who idolized these stunt performers. It was not very long before the children recognized the recreational workers when they saw them and were willing to walk to the playgrounds with them. Some of the children had to take care of younger sisters and brothers and gave this as their excuse for remaining in the streets. The workers managed to get some of the girls to wheel these babies down to the boys' gymnasium in the park. Although the children could not leave the babies, they were forming the habit of getting out of the crowded streets and into more pleasant surroundings. On very warm days, the workers took the children to the Frog Pond on the Common. This also took them away from the congested streets. Many days, it was impossible to reach all the streets and the children complained when the workers did not visit their streets, that their mothers had said that they could go that day, and as it was, they had not gone to the playground.

Those children who did not go to the playground, amused themselves by playing and making soap bubbles on their doorsteps. The workers gave these girls cards and paper dolls. The boys who could not get away were given handballs. Had there been a playground near that section, more children would have been reached and there would have been a very large attendance. The children would have flocked to it, were it near at hand. The Center worker realized that many children actually did not know that such a thing as a playground existed, simply because they had been born and brought up in that section. It was a tragedy to learn that so few of these children actually knew how to play. Their anxiety to learn and their willingness to do what the workers asked, was a pathetic revelation. Another question asked by many of the children was why the workers wanted to give so much of their time to playing with them and teaching them the games. It was surprising how many confidences and friendships were gained in that section, which at first had seemed to be unapproachable.

The section from Myrtle to Leverett Street, having playgrounds, did not present so serious a problem. Children were accustomed to go to these playgrounds. With all that, however, about 1410 children were taken to the playgrounds in that section. The Charles Street crossing presents a most difficult situation. There having been three accidents on Allen Street near Charles Street, the mothers would not permit the children to go to the playground alone. The children were so trained, after a while, that they waited for the recreational worker. She would cross the street with them and take them to the playground. The playground workers, whose coöperation we had, seldom began their afternoon activities until our groups had been brought to them. The old problem arose of convincing the mothers that their children would be brought back at a certain hour. Explanations removed this difficulty.

There was an increase in daily attendance at the playgrounds toward the end of August, due to the reopening of the Blackstone School yard. This is the nearest playground for the children from Pitts, Hale and Norman Streets. However, it is open only to children under twelve years of age. What are we going to do with the boys of 14 and 15 years of age, who do not work? They want to play handball in some sections of the school yard, but of course, this is not permitted. It would be an excellent plan if the Wells School yard could be turned into a playground for the older boys and the Blackstone School yard kept for the younger children. The Winchell School playground is very narrow and the children who are not in the swings are, therefore, crowded into a small space. There is another yard alongside that of the Winchell School, which would make an ideal playground, were swings installed. This would increase the attendance in this particular section. It was too bad that the Phillips School had been closed for repairs during most of the summer. The Bowdoin School playground supplied enjoyment for the younger children mostly. The older boys and girls preferred the Phillips School yard, when they could get it. Another difficulty was that the children at the foot of the hill would not walk up to the Bowdoin School playground. The Peter Faneuil playground helped a little, but not many of the children lived near it. On rainy days, the playgrounds are closed and the children played out in the rain. It would help tremendously if the children could play indoors. One of the most interesting phases of the work, was the talks with the mothers, explaining to them the dangers in heavy traffic and what the playgrounds were accomplishing. A chart of accidents occurring daily, was kept and the mothers informed. They knew the menace of the automobile, but it impressed them more to hear the names of the streets on which these accidents occurred. Mothers, whose interest was aroused, coöperated to the fullest in helping the plan to send the children to the playgrounds.

The older boys presented a different problem. To get the consent of their mothers meant little. They needed something more. The plan of making boys and girls "captains" proved very successful. The awarding of safety badges was a most helpful in-

centive. Six boys and girls were chosen each week to wear these badges. They took the younger children from the streets to the playground. At the end of the week, having signed their names to the number of children they had taken to the playground, they were enrolled as captains. This gave them some responsibility and made them feel important. It also entitled them to attend a picnic or outing. The captains had to be at the playground every day. It was interesting to watch some of these who were problem boys try so hard for the badges. An approximate total of *2013* children were reached. It would seem to the community worker that Kennard Avenue should be one of the streets considered to be temporarily roped off for street play work, since it is a blind alley and the children could play there in safety.

NOTICES

THE LASKER FOUNDATION FOR MEDICAL RESEARCH

The University of Chicago has been enriched by the establishment, by Albert D. and Flora W. Lasker, of the Lasker Foundation, consisting of $1,000,000, the net income of which is to be devoted to the promotion of medical education and research at the University. It is the wish of the donors that the fund shall be used primarily for research into the causes, nature, cure and prevention of degenerative diseases.

THE AMERICAN BOARD OF OTOLARYNGOLOGY

An examination was held in Minneapolis, Monday, June 11th, 1928. Forty-nine applicants were examined—forty-six being granted certificates.

The Board will hold an examination in New York City, Friday, October 12th, 1928, and in St. Louis, Monday, October 15th, 1928.

Those wishing to come before this Board, please advise with

Dr. W. P. Wherry, Secretary,
1500 Medical Arts Building,
Omaha, Nebraska.

H. P. Mosher, M.D., *President.*

CHANGE OF ADDRESSES

Dr. Fred F. Weiner has moved from 37 Ellsworth Street, Brockton, to 98 Moraine Street, Brockton.

Dr. Charles Sziklas has moved from 31 Massachusetts Avenue, Boston, to 270 Commonwealth Avenue, Boston.

NOTICE OF MEETING

INTERSTATE POST GRADUATE MEDICAL ASSOCIATION

The Annual Assembly of the Interstate Post Graduate Medical Association of North America will be held in the City of Atlanta, Ga., Oct. 15-19th incl. 1928. All medical men in good standing are privileged to register, and all are cordially invited to attend.

Dr. George W. Crile, Chairman of the Program Committee, has arranged an exceedingly attractive program. Eighty-two renowned clinicians and teachers from all sections of the United States and Canada, and from several European countries have definitely accepted places on the program.

A complete program and folder of information will be mailed about four to six weeks in advance of the opening of the assembly, to all medical men in good standing, as listed in the latest Directory of the American Medical Association.

Edwin Henes, Jr., M.D.,
Executive Secretary.

SOCIETY MEETINGS

October 15-19 — Interstate Post Graduate Association. Complete notice elsewhere on this page.

December 3-7 — Radiological Society Convention. Detailed notice appears on page 712, issue of May 17.

BOOK REVIEWS

"Anthelmintics and their Uses in Medical and Veterinary Practice." By R. N. Chopra, M.A., M.D., and Asa C. Chandler, M.Sc., Ph.D. The Williams & Wilkins Company, Baltimore, 1928, 291 pages.

This volume covers a new field. It contains useful information from widely scattered sources. The presentation is logical and concise. The book is a useful contribution in a neglected field.

Bacteriology and Surgery of Chronic Arthritis and Rheumatism. By H. Warren Crowe.

Dr. Crowe has succeeded in making his second book more interesting than his first, which was more technical. In this volume he goes quite extensively into the classification of arthritis, accepting the classification of the Rheumatism Committee in England but adding to the rheumatoid and osteoarthritis, the mixed arthritis.

In regard to the aetiology, he believes that osteoarthritis is invariably due to a streptococcus which inhabits the alimentary tract. Rheumatoid arthritis, he finds, a staphylococcus of a particular variety which he has called a micrococcus deformans.

To quote from his analysis of results in Chapter 7: "All persons are carriers of streptococci in their alimentary tract and upper air passages, and of staphylococci in the skin and other places. Of streptococci there are very great numbers of distinct varieties, whereas staphylococci are more morphologically less varied, and serologically closely related to each other." He brings out the point which is of a great deal of importance, that a person's resistance is very important in the care of arthritis, also in the cause. If for any reason the resistance is low, or is suddenly lowered by shock, chill, infection of any kind, with these normal inhabitants present in the body they immediately may become the cause of pathological changes in the joints. If these two infections are both present in the same individual, he calls the type the mixed type of arthritis.

There is a very good chapter on the surgical treatment of arthritis by Herbert Frankling, which takes up in a rather concise way the various methods of treatment used by different surgeons, with particular warning that the surgery of arthritic joints is oftentimes not a safe procedure. The book is worth reading from many angles and gives much material for careful study.

The Meningiomas: Arising from the Olfactory Groove and Their Removal by the Aid of Electro-Surgery. By HARVEY CUSHING, C.B., D.S.M., A.M., M.D. Harvard, LL.D. Cambridge and Glasgow. 53 pages; 28 illustrations. Jackson, Wylie & Co., Publishers, Glasgow, 1927.

This volume contains the MacEwen Memorial Lecture for 1927 as delivered by Professor Cushing at Glasgow University.

The first few pages are devoted to the surgical history of Glasgow and the mighty figures in surgery whose voices still echo through the halls of the University. These sketches are necessarily brief, but the word pictures are extremely vivid and convincing.

The second part of the book, the kernel of the nut, deals with the meningiomas and with their surgical treatment; not with meningiomas in general but with that group of them which arise from the olfactory groove. After reading Dr. Cushing's description it seems almost impossible to miss one of these tumors, now that he has called the symptom complex to our attention, but their recognition is not as easy as it seems. Dr. Cushing's experience with the new growths of the brain is enormous and yet he gives us more than a word of warning as to the difficulties of diagnosis. It is only as the result of careful work by the neurologist, the ophthalmologist and the psychiatrist that this important, though little known group of brain tumors may be referred to the neurosurgeon while the condition is yet operable.

The application of electro-surgical methods to the new growths involving the brain is a long step in the right direction and is the logical outcome of Dr. Cushing's insistence on exact and painstaking hemostasis. It may seem extraordinary to prolong operative procedures to the extent advocated but we must remember that Dr. Cushing has always considered that the time factor in surgery was unimportant.

This little volume teaches two lessons—Firstly, the diagnosis of a very definite but little known group of meningeal tumors. Secondly, a new application of electrosurgical methods. As literature it is worthy of its author. It should contain food for thought for the rhinologist and the ophthalmologist as well as for the neurologist and the neurosurgeon.

The New York Academy of Medicine Lectures on Medicine and Surgery. 319 pages, 39 illustrations. Paul B. Hoeber, Inc., New York. 1928.

This volume consists of fifteen lectures given at the New York Academy of Medicine in 1926 and 1927. A wide range of subjects is included, but all the papers are addressed to the general practitioner. Most of the articles cover a very broad field and so of necessity have to give a rather superficial sketch.

George M. MacKee gives an excellent illustrated review of syphilis, emphasizing its cutaneous manifestations, and Harlow Brooks discusses the treatment of cardiovascular syphilis.

The influence of climate on tuberculosis is presented by J. A. Miller with an explanation of the climate indicated for various types of the disease.

David Riesman reviews and discusses the treatment of pneumonia in a thorough, lucid manner. The various methods of treatment are explained, including general and special phases, serum, Huntoon's antibodies, Felton's antibodies, vaccine, quinine, and optochin.

Among the other topics considered are: intestinal obstruction by J. F. Erdmann; otological infections by S. J. Kopetsky; obstetrical problems by J. O. Polak; surgery of the thyroid by E. H. Pool; and eye conditions by J. M. Wheeler.

The articles as a whole are excellent and are written by real leaders of the profession. However, one sometimes questions whether the present tendency to so multiply the number of published volumes of clinics and lectures is truly beneficial to the profession as a whole.

BOOKS RECEIVED FOR REVIEW

A Handbook of Clinical Gynecology and Obstetrics by Rae Thornton La Vake. Published by the C. V. Mosby Company. 281 Pages.

Syphilis by Henry H. Hazen. Published by the C. V. Mosby Company. 643 Pages.

The Duodenum by Pierre Duval. Published by the C. V. Mosby Company. 212 Pages.

Operative Surgery by J. Shelton Horsley. Published by the C. V. Mosby Company. 893 Pages.

Modern Methods of Treatment by Logan Clendening. Published by the C. V. Mosby Company. 815 Pages.

The Stereoscope in Ophthalmology by David W. Wells. Published by the E. F. Mahady Company. 107 Pages.

Clinical Medicine by Oscar W. Bethea. Published by the W. B. Saunders Company. 700 Pages.

Collected Papers of The Mayo Clinic. Edited by Mrs. M. H. Mellish and H. Burton Logie. Published by the W. B. Saunders Company. 1330 Pages.

Infancy and Human Growth. Edited by Arnold Gesell. Published by the Macmillan Company. 418 Pages.

Methods and Problems of Medical Education. Published by the Rockefeller Foundation. 386 Pages.

Gynecology. Edited by William P. Graves, M.D. Published by W. B. Saunders Company. 1016 Pages.

Addresses on Surgical Subjects. Edited by Sir Berkeley Moynihan, Bart. Published by W. B. Saunders Company. 348 Pages.

International Clinics. Edited by Henry W. Cattell and others. Published by the J. B. Lippincott Company. 344 Pages.

Story of Electricity. Edited by Herman Goodman, M.D. Published by Medical Life Press. 62 Pages.

The International Medical Annual. Published by William Wood & Company. 574 Pages.

Folklore of the Teeth by Leo Kanner. Published by Macmillan. 316 Pages.

The Examination of Patients by Nellie B. Foster. Published by W. B. Saunders Company. 392 Pages.

Hay Fever and Asthma by Ray M. Balyeat. Published by the F. A. Davis Company. 310 Pages.

Eat, Drink and Be Healthy by Clarence W. Lieb. Published by John Day. 180 Pages.

Urinary Analysis and Diagnosis by Microscopical and Chemical Examination by Louis Heitzmann. Published by William Wood & Company. 366 Pages.

Nutrition by Walter H. Eddy. Published by the Williams & Wilkins Company. 237 Pages.

Certified Milk Conferences Held in 1927. 322 Pages.

The Medical Department of the United States Army in the World War. Vol. IX, *Communicable and Other Diseases.* Published by the United States Government Printing Co. 628 Pages.

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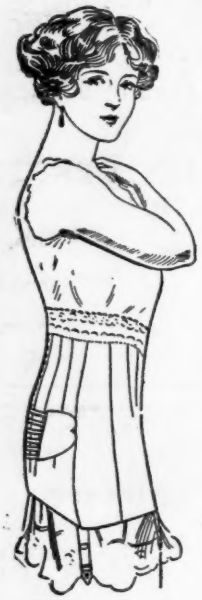

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